SECTION 6
PARTS LIST

6.1 GENERAL

This section provides parts lists for the Model C100 and C200 Incubators. Part Numbers of accessories and single use items are provided below.

ACCESSORIES

Accessory Shelf Assembly
- With Lamp Assembly (110/120V) 26 610 80
- Without Lamp Assembly (110/120V) 26 610 81
- Without Lamp Assembly (220V) 26 610 82
- With Lamp Assembly (220V) 26 610 83

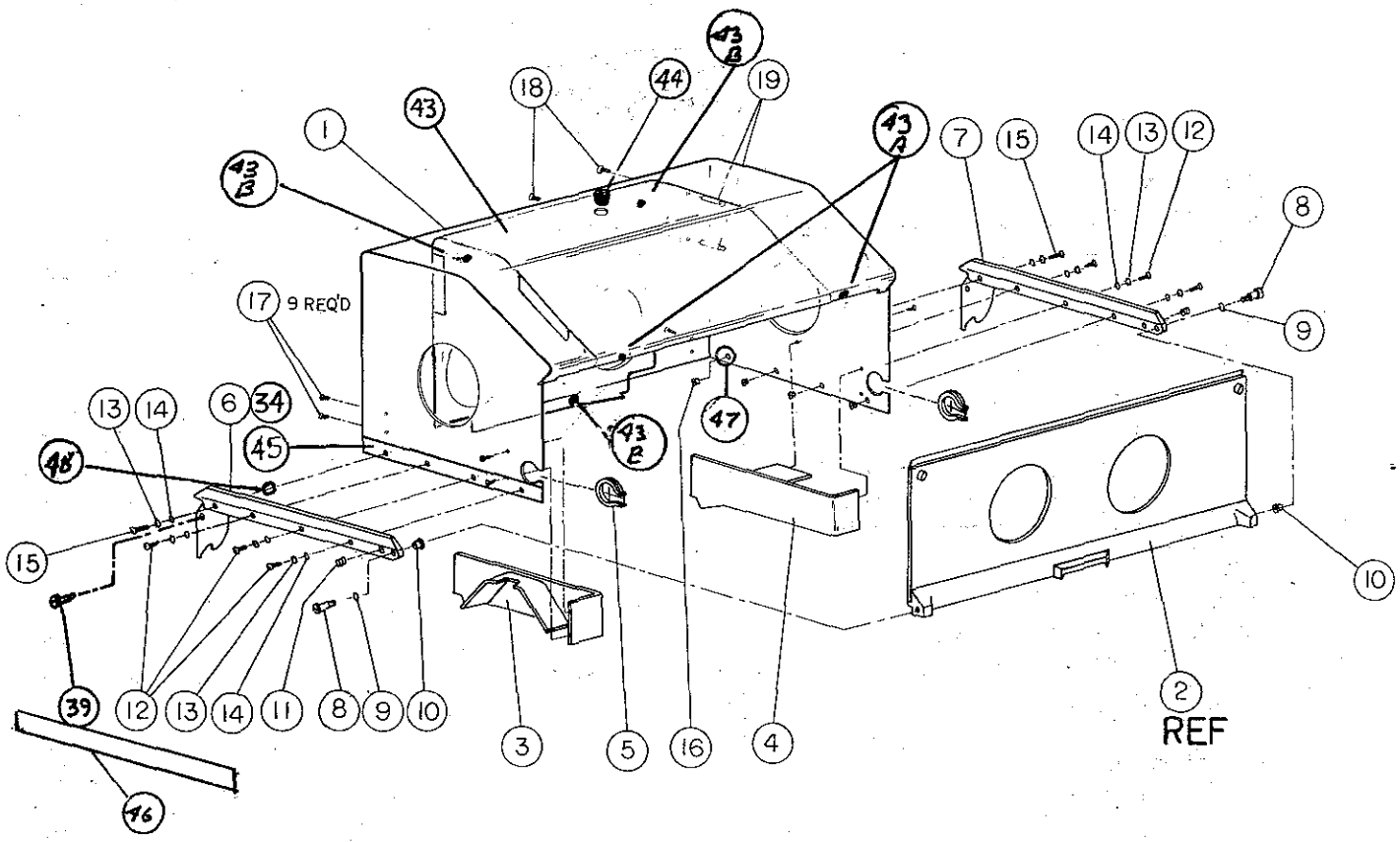
Sterilizer Tank 26 517 01
Vapojette® Humidifier 26 750 70
Weighing Scale 26 830 70
Weighing Hook (15" for Weighing Scale) 26 610 76
- (22" required when Weighing Scale is on Accessory Shelf) 26 610 78

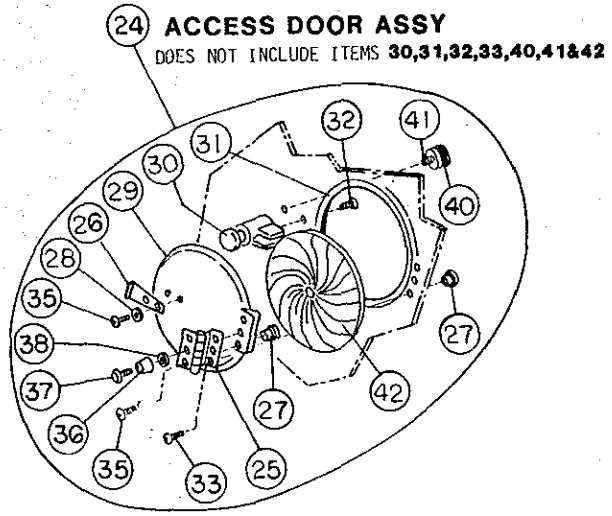
Weighing Sling 26 830 20
I.V. Pole 68 452 70
Accessory Trays
- Right Side 26 850 70
- Left Side 26 810 70

Oxygen Cylinder Rack 26 840 70
Remote Alarm, Model AM68–1 ..... 68 411 70

SINGLE USE ITEMS

Entry Port Sleeves (100 per case) 26 920 70
Access Door Cuffs Disposable, Round Door (100 per case) 26 934 81
Access Door Cuffs Disposable, Oval Door, C100 QT® (100 per case) 68 120 70
Mattresses (10 per case) 79 265 10
Critter Covers® Probe Covers (Case of 600) 68 209 45
Storage Covers (50 per pack) 26 920 72
Humidity Indicator Cards (5 per pack) 68 120 43
Kleenaseptic® Germicidal Surface Cleanser (12 per pack) 79 251 72
Vapaseptic® Air Sanitizer (Carton of 12) 79 250 71





IRIS PORT ASSEMBLY

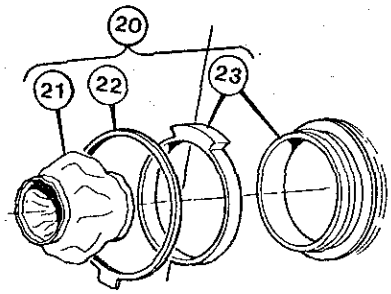


FIGURE 6.1 PARTS LOCATION DIAGRAM, HOOD ASSEMBLY (SERIES 01)

(Change 15)

TABLE 6.1 HOOD ASSEMBLY – ROUND DOOR – (SERIES 01), PARTS LIST

(Sheet 1 of 2)
PART NO. 68 147 70 (Includes Heat Shield)
PART NO. 68 149 70 (Without Heat Shield)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1**		Replacement Hood Kit (Acrylic only, includes Items 40, 46 and 47)	68 902 74
2*		Access Panel Assy. (Refer to Figure 6.2)	
3***		Baffle, Left (White Structural Foam)	68 156 72
4***		Baffle, Right (White Structural Foam)	68 156 76
5		Grommet, Access	68 120 45
6		Strip, Hood Mounting, Side, Left	68 121 10
7		Strip, Hood Mounting Side, Right	68 121 00
8*		Screw, Shoulder, Slotted Head	68 121 30
9*		Washer, Non–Metallic, 3/8 I.D.	68 121 40
10*		Brg, Flanged, Non–Metallic 3/8 I.D.	68 121 35
11*		Plunger, Spring	68 121 45
12		Scr. 10–32 x 5/8 TR. PH, SS	99 042 58
13		Washer, Lock, Internal No. 10, SS	99 123 92
14		Washer, Flat, .219 I. D. x .366 O.D., SS	99 123 62
15		Screw, 10–32 x 7/8 TR PH SS	99 043 18
16		Stud, Threaded, 10–32	26 301 14
17		Refer to Screw Replacement Chart, Page 6–4	
18		Refer to Screw Replacement Chart, Page 6–4	
19		Mounting Stud, Card	68 120 41
20		Iris Port Assy.	68 120 74
21		Sleeve, Iris Port, Reusable (P/O item 20)	12 615 00
22		Retainer Ring, Iris Port (P/O item 20)	68 120 32
23		Ring Assy., Iris Port (P/O item 20)	68 120 76
24		Access Door Assy.	26 652 73
25		Hinge, Access Door (P/O item 24)	26 651 12
26		Strike (P/O Item 24)	26 669 30
27		Nut, Blind 6–32 (P/O item 24)	26 651 10
		Nut, Acorn, 6 – 32 AL	99 105 20
28		Not Used	
29		Access Door (P/O Item 24)	26 650 00
30		Latch Assy.	26 960 70
31		Gasket, Access Door	68 120 00
32		Refer to Screw Replacement Chart, Page 6–4	
33		Refer to Screw Replacement Chart, Page 6–4	
34*		Trim Strip	68 400 26
35		Scr 6–32 x 5/16 TR, PH, SS (P/O Item 24)	99 022 98
36		Door Stop (P/O Item 24)	26 605 00
37		Scr 6–32 x 9/16 RD, PH, SS	99 024 15
38		Bumper Spacer (P/O Item 24)	26 651 15
39*		Hood Pivot Screw and Washer Retrofit Kit (Secures Hood to Base) Includes Item 48	68 902 75

* Not supplied with Hood Assembly – Must be ordered separately. **Also order Quantity 2 of Item 46.
***When replacing clear plastic baffles, order Retrofit Kit 68 902 83.

(Change 16)

TABLE 6.1 HOOD ASSEMBLY – ROUND DOOR – (SERIES 01), PARTS LIST

(Sheet 2 of 2)

PART NO. 68 147 70 (Includes Heat Shield)

PART NO. 68 149 70 (Without Heat Shield)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
40		Knob, Retainer, Small, .71 Dia.	68 156 62
41		Refer to Screw Replacement Chart, below	
42*		Access Door Cuff, C100 Round Door (Case of 100) Disposable	26 934 81
		Access Door Cuff Oval Door (Case of 100) Reusable	26 120 55
43		Heat Shield Assembly	68 122 70
43A		Spacer, Front (2 per Heat Shield)	68 122 05
43B		Spacer, Rear (3 per Heat Shield)	68 122 10
44		Stopper, Weighing Hook	12 621 70
45		Strip, Plastic, White (Part of Item 1)	68 147 00
46		Trim Strip	68 400 26
47		Disk, Reinforcing	68 156 03
48		Washer, 5/16 LK, SP SS, Heavy Load	99 126 33

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SCREW REPLACEMENT CHART

If Item 27 is a Blind Nut			If Item 27 is an Acorn Nut		
17	Screw 6 x 1/2 BF, FL	99 085 55	17	Screw 6 x 5/8 B7 TR PHS4	99 085 56**
18	Screw 6 – 32 x 3/4 FL, PH	99 024 61	18	Screw 6 – 32 x 3/4 TR, PH	99 024 69
32	Screw 6 – 32 x 1/4 FL, PH	99 022 77	32	Screw 6 – 32 x 1/4, TR, PH	99 022 72
33	Screw 6 – 32 x 3/16 TR, PH	99 022 44	33	Screw 6 – 32 x 7/16, TR, PH	99 023 63
41	Screw 6 – 32 x 1" TR, PH, SS (holds 68 156 62/63 on)	99 025 19	34	Set Screw 6 – 32 x 11/8"	99 025 19

* Not supplied with Hood Assembly – Must be ordered separately.

**Mounting Screw for clear plastic baffles. Order 6–32 x 7/16 TR PH SS 99 023 63 for white plastic baffles.

(Change 16)

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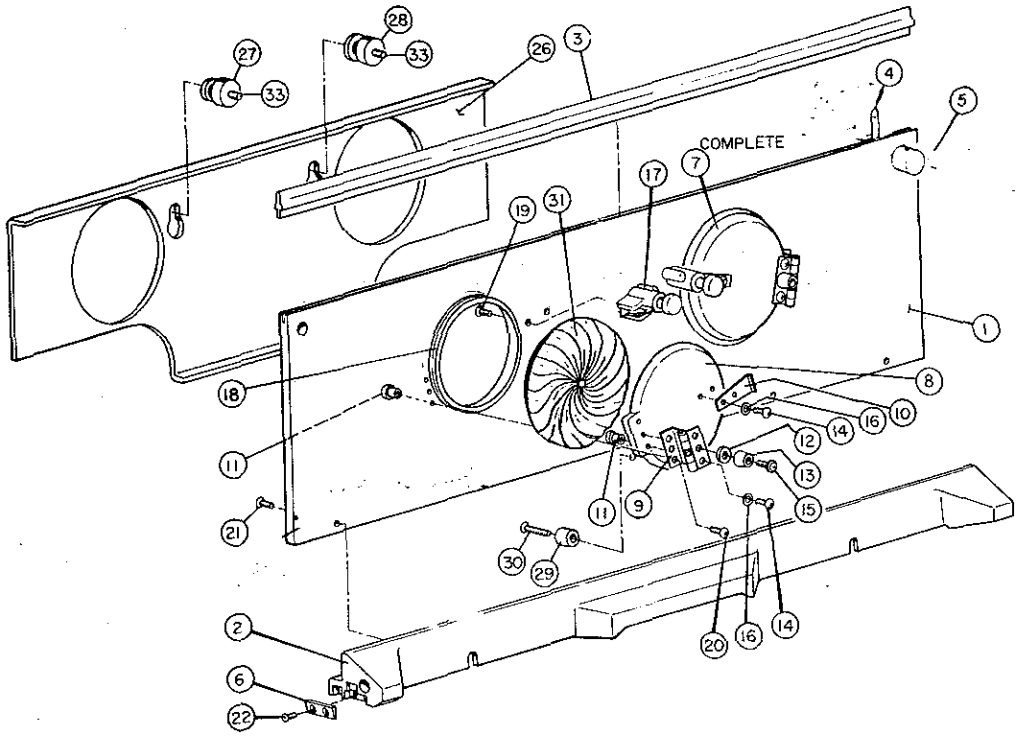

FIGURE 6.2 PARTS LOCATION DIAGRAM, ACCESS PANEL ASSEMBLY (SERIES 01)

(Change 13)

TABLE 6.2 ACCESS PANEL ASSEMBLY (SERIES 01), PARTS LIST

PART NO. 68 159 70 (Includes Heat Shield)

PART NO. 68 158 70 (Without Heat Shield)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		Panel, Access (Acrylic only; includes items 1, 2, 3, 6 and 34)	68 157 75
2		Strip, Access Panel Mounting, Front (Blue)	68 121 21
3		Strip, Sealing (Part of Item 1), Grooved	68 512 10
		Strip, Sealing (Part of Item 1), Glued on	68 157 21
4		Refer to Item 34	
5		Refer to Item 34	
6		Plate, Striker	68 121 55
7		Access Door Assy. Complete (includes items 8 through 16)	26 652 73
8		Access Door	26 650 00
9		Hinge, Access Door	26 651 12
10		Strike	26 669 30
11		Blind Nut 6–32	26 651 10
		Acorn Nut 6–32	99 105 20
12		Spacer Bumper	26 651 15
13		Stop Door	26 605 00
14		Screw, #6–32 x 5/16 TR, PH, SS	99 022 98
15		Screw, #6–32 x 9/16 RD, PH, SS	99 024 15
16		Washer, #6 LK, SHI, SS	99 122 19
17		Latch Assy.	26 960 70
18		Gasket, Access Door	68 120 00
19		Refer to Screw Replacement Chart below	
20		Refer to Screw Replacement Chart below	
21		Screw, 8–32 x 5/16 TR, PH, SS	99 031 05
22		Screw 6–32 x 1/4 FL, PH, SS	99 022 75
23		Not Used	
24		Not Used	
25		Not Used	
26		Shield, Heat	68 157 55
27		Knob, Retainer, Small	68 156 62
28		Knob, Retainer, Large	68 156 63
29		Stop	68 157 66
30		Screw, 8–32 x 7/8 FL, PH, SS	99 033 19
31		Access Door Cuff, Disposable (Case of 100)	26 934 81
32		Not Used	
33		Screw, 6 – 32 x 1 Lg, TR, PH, SS	99 025 19
34		Pawl Latch Replacement Kit	68 902 96

SCREW REPLACEMENT CHART

If Item 11 is a Blind Nut:

19 . . Screw 6 – 32 x 1/4 FL, PH 99 022 77

20 . . Screw 6 – 32 x 3/16 TR, PH 99 022 44

If Item 11 is an Acorn Nut:

19 . Screw 6 – 32 x 1/4, TR, PH . . . 99 022 72

20 . Screw 6 – 32 x 7/16, TR, PH . . 99 023 64

(Change 16)

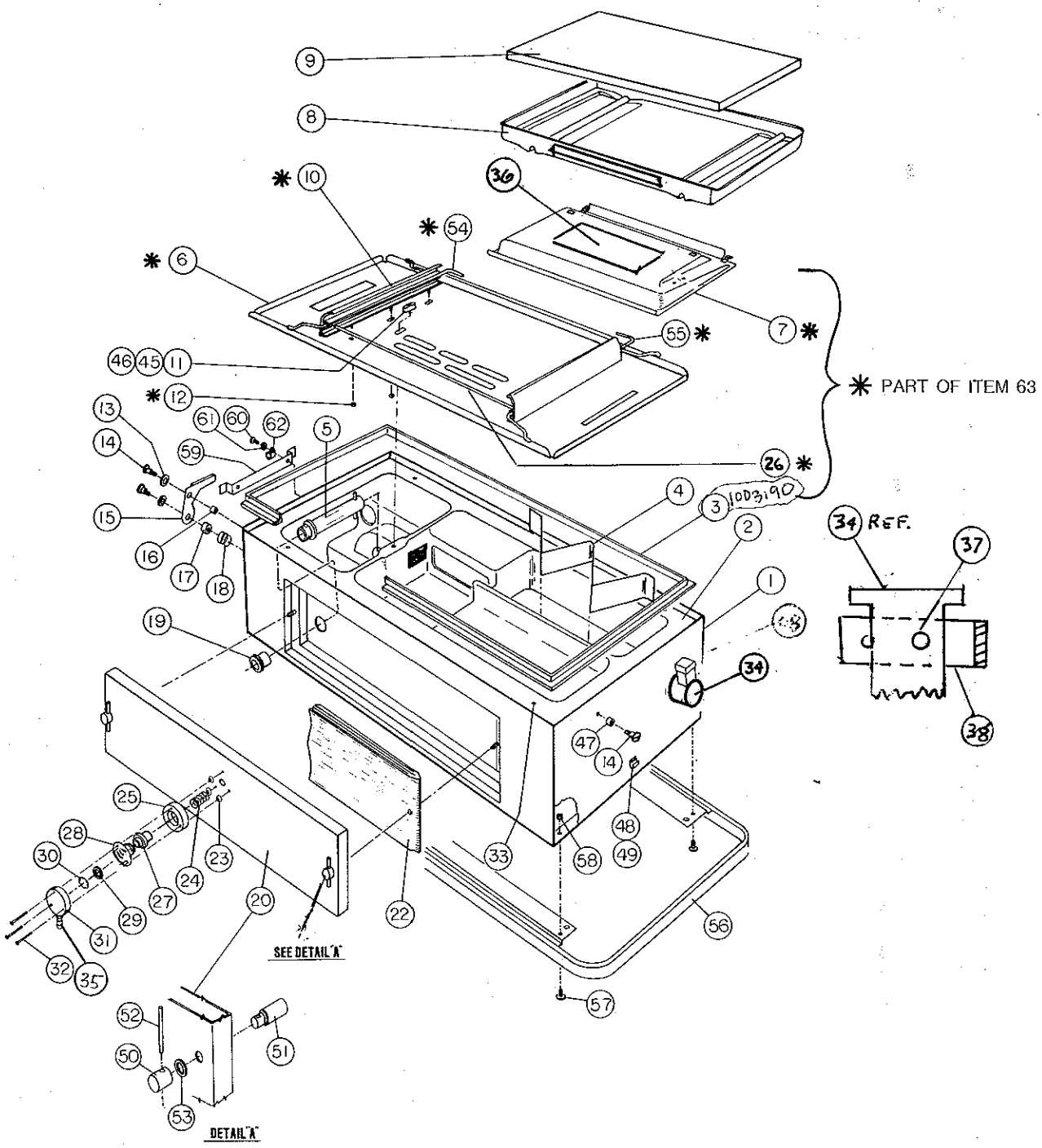

FIGURE 6.3 PARTS LOCATION DIAGRAM, SHELL ASSEMBLY AND DECK ASSEMBLY

(Change 16)

TABLE 6.3 SHELL ASSEMBLY AND DECK ASSEMBLY, PARTS LIST

(Sheet 1 of 3)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
		Shell Assy., W/O Ice Chamber:	
		English Labeling (120V)	68 110 70
		English Labeling (240V)	68 110 71
		Spanish Labeling	68 110 80
		French Labeling	68 110 90
		German Labeling	68 110 96
		Shell Assy., With Ice Chamber:	
		English Labeling (120V)	68 111 70
		English Labeling (240V)	68 111 71
		Spanish Labeling	68 111 80
		French Labeling	68 111 90
		German Labeling	68 111 96
1		Shell, W/O Ice Chamber	68 110 00
		Shell, With Ice Chamber	68 110 01
2	(where water sits)	Main Box, Machined ...Reservoir...5672.	26 100 30
3		Gasket, Hood	12 216 00
4		Baffle, Humidity Reservoir	26 101 02
5		Cross Feed Pipe Assy.	68 112 80
6*		Main Deck, Replacement	68 902 71
7*		Air Curtain Cover Replacement Kit	68 903 94
8		Deck, Mattress	
		English Labeling	68 160 15
		Spanish Labeling	68 160 16
		French Labeling	68 160 17
		German Labeling	68 160 18
9		Mattress/Cover Assy.	68 142 70
10*		Rail, Deck	68 141 18
11		Knob, Bar, Plastic	68 140 01
12*		Nut, 8–32, .250 HX x .070/.060 THK, BR, NI, PL	99 106 68
13		Washer, 3/8 x 5/8 FL, SS .064 THK	99 126 70
14		Screw, Shoulder, Slotted	68 110 51
15		Handle, Latch	68 110 55
16		Spacer, Non–Metallic	68 110 58
17		Spacer, Non–Metallic	68 110 56
18		Spring, Torsion	68 110 57
19		Grommet, Filter	68 112 15
20		Filter Cover Assy.:	
		English Labeling	68 133 70
		Spanish Labeling	68 133 75
		French Labeling	68 133 80
		German Labeling	68 133 85

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* Part of Item 63. Series 01 Incubator Main Deck Assembly. Refer to Table for Parts Breakdown on Series 02 Incubator Main Deck Assembly.

(Change 14)

TABLE 6.3 SHELL ASSEMBLY AND DECK ASSEMBLY, PARTS LIST

(Sheet 2 of 3)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
21		Not Used	
22		Filter Pad (Box of 4)	26 945 70
23		Spacer, Non–Metallic	68 130 52
24		Spring, Compression	68 130 65
25		Cylinder	68 130 55
26*		Shaft, Plenum	68 141 32
27		Filter, Cartridge Assembly	68 130 67
28		Diaphragm	68 130 57
29		Washer, Non–Metallic	68 130 51
30		Ring, Retaining, Wall 5105–62SS	99 182 93
31		Cap	68 130 60
32		Screw, 6–32 x 1–3/4 OV, PH, SS	99 026 18
33		Screw, 8–32 x 1/2 FL, SL, SS	99 031 96
34		Fill Spout Assy.	See Note
35		Fitting, Nipple, Hose	01 017 00
36		Air Curtain, Label, (included with Item 7)	68 141 29
37		Screw, 4–40 x 1/4 KN, HD, NL (Thumbscrew)	99 010 63
38		Fill Spout Stopper	68 110 50
39		Filter Cover Knob/Retainer Replacement Kit	68 901 15
40		Not Used	
41		Not Used	
42		Not Used	
43		Not Used	
44		Screw 4– 40 x 5/16", TR, PH, SS	99 010 77
45		Shaft, Deck Retention	68 140 02
46		Screw, 8–32 x 1/4 PN, SL, SS	99 030 66
47		Spacer, Non–Metallic	68 110 59
48		Hook, Latch	24 144 01
49		Screw, 4–40 x 5/16 FL, S1, SS	99 010 76
50		Knob, Filter Cover	Refer to Item 39
51		Shaft, Filter Cover Knob	Refer to Item 39
52		Handle, Knob	Refer to Item 39
53		Washer, .38 ID x .62 OD x .015	Refer to Item 39
54*		Elevator, R.H.	68 140 33
55*		Elevator, L.H.	68 140 32
56		Guard Rail	68 410 70
57		Screw, 10–32 x 1/2 TR, PH, SS	99 042 01
58		Nut, 10–32, HX, KEPS, CA	99 107 36
59		Cleat, Power Cord	68 110 53
60		Screw, 10–32 x 5/8 TR, PH, SS	99 042 58
61		Washer, No. 10, Lock, Split, ST	99 123 90

* Part of Item 63. Series 01 Incubator Main Deck Assembly. Refer to Table for Parts Breakdown on Series 02 Incubator Main Deck Assembly.

NOTE: Replace with Replacement Kit, Part No. 68 902 70.

(Change 16)

TABLE 6.3 SHELL ASSY. AND DECK ASSY., PARTS LIST

(Sheet 3 of 3)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
62		Cable Clamp, Loop Type	17 061 25
63		Main Deck Assembly (Series 01 Incubators)	68 140 70
		Main Deck Assembly (Series 02 Incubators)*	68 521 70
64		Recessed Outlet Panel–units equipped with	
		Controllers C68–2 and C82–1 Series 00	68 905 40 ■
		Recessed Outlet Panel–units equipped with	
		Controllers C68–2 and C82–1 Series 01	68 905 40 ■
65		Recesses Outlet Panel Label–units equipped with Controllers C68–2 and C82–1 Series 00	
		English Labeling	68 905 40 ■
		Spanish Labeling	68 111 51
		French Labeling	68 111 52
		Recessed Outlet Panel Label–units equipped with Controllers C68–2 and C82–1 Series 01	
		English Labeling	68 111 60
		Spanish Labeling	68 111 61
		French Labeling	68 111 62
66		Filter Cover Assembly w/o O_2 Limiter	68 134 70
		Consists of:	
		Knob, Filter Cover	68 130 30
		Shaft, Filter Cover Knob	68 130 35
		Handle, Knob	68 130 40
		Washer, .38 ID x .62 OD x .015 THK, FL, NY	99 126 11
		Oxygen Input Cover	68 133 20
		Screw, 6 – 32 x 1/2" TR PH SS	99 023 92
67		Latch Ramp	68 110 42
68		Label, Warning, Inf. Burn Hazard, Eng	68 111 05 ■

*Refer to Table 6.21 for Parts Breakdown.

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(Change 16)

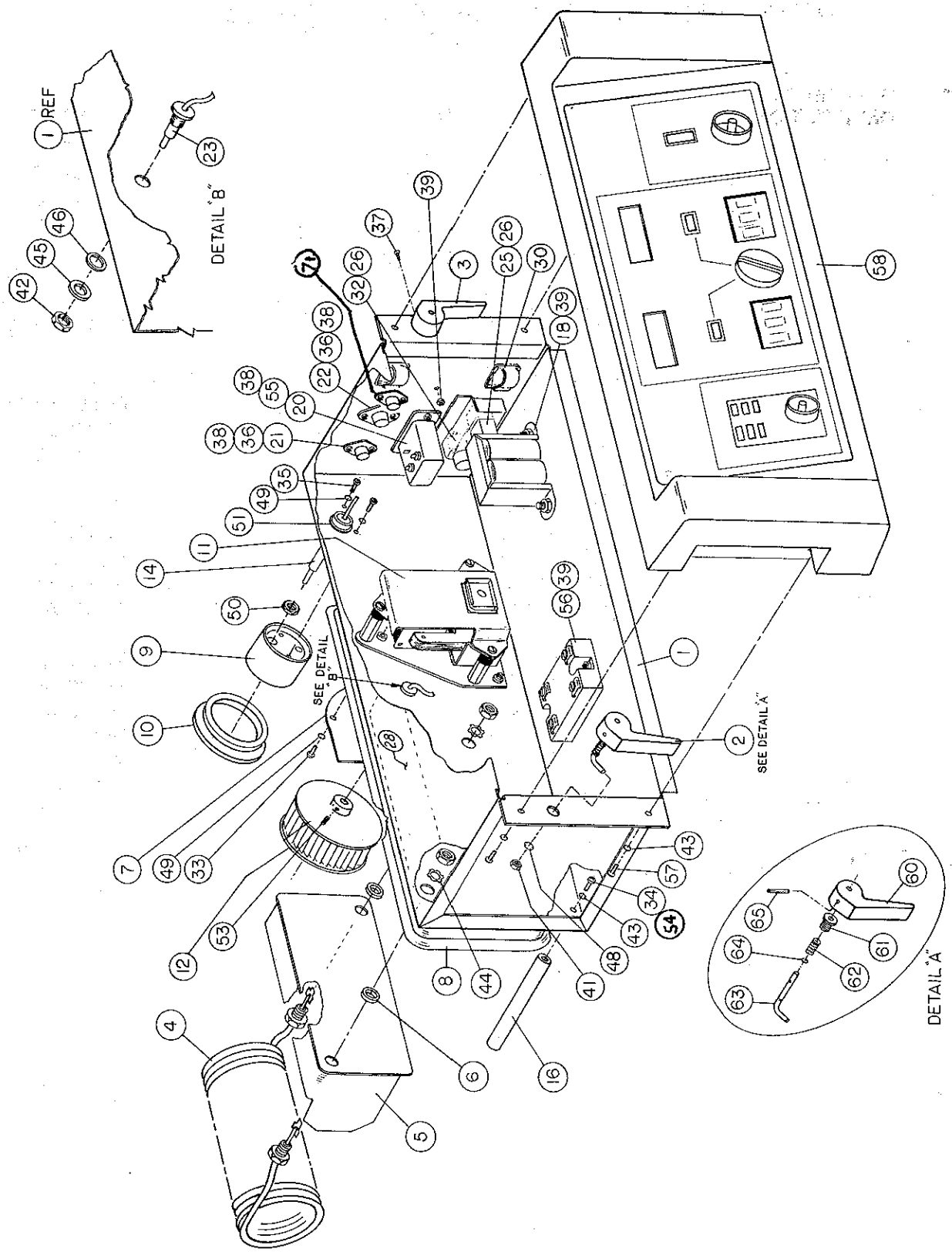

FIGURE 6.4 PARTS LOCATION DIAGRAM, MODEL C68–2 CONTROLLER

(Change 16)

TABLE 6.4 MODEL C68–2 CONTROLLER, PARTS LIST

(Sheet 1 of 3)

PART NO. 68 215 70T, 120V, ENGLISH
PART NO. 68 215 71T, 120V, SPANISH
PART NO. 68 215 80T, 240V, ENGLISH
PART NO. 68 215 72T, 120V, FRENCH
PART NO. 68 215 90T, 100V, JAPANESE
PART NO. 68 215 81T, 240V, SPANISH
PART NO. 68 215 83T, 240V, GERMAN
PART NO. 68 215 82T, 240V, FRENCH

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
		Chassis Assy., 120V Units	68 212 70
		Chassis Assy., 240V Units	68 212 80
		Chassis Assy., 100V Units	68 212 90
1		Chassis, Controller (Weldment)	68 215 10
2		Latch Assy., Left	68 207 80
3		Latch Assy., Right	68 207 81
4	HTR1	Heater, 120V	68 208 25
	HTR1	Heater, 240V	68 208 26
	HTR1	Heater, 100V	68 208 27
5		Baffle/Plate, Heater	68 208 20
6		Spacer, Heater Plate	26 516 05
7		Plate, Stiffener	68 204 21
8		Gasket	26 503 00
9		Plug, Thermostat	12 512 01
10		Gasket	26 501 00
11	B1	Motor Replacement Kit, 120V	68 905 70
	B1	Motor Replacement Kit, 220V	68 905 71
12		Impeller	68 205 45
13		Not used	
14	RT1A & B	Dual Thermistor Assy., Hi–Temp Alarm	68 214 70
15		Not Used	
16		Post, Bumper	68 215 12
17		Not Used	
18	T1	Power Transformer Assy., 120V	68 206 71
	T1	Power Transformer Assy., 240V	68 206 77
	T1	Power Transformer Assy., 100V	68 206 81
19		Not Used	
20	J14	Connector Assy., Power	68 205 81
21	J7	Receptacle Assy., Air Temperature Probe	68 209 86
22	J8	Patient Probe Rcpt. Assy	68 209 75
23	RT4	Thermistor Assy., Air Flow	68 214 80
24		Not Used	
25	CB1	Circuit Breaker, Sgl. Pole, 5 Amp (100 and 120 Vac Units)	17 BH 150
26	CB1, CB2	Circuit Breaker, Sgl. Pole, 5 Amp (240 Vac Units)	17 BH 150

IMPORTANT NOTE: 220V/240V Models equipped with Gray Oriental Motors. The Heat Sink mounted on the Dual Thermistor, Item 14, is Part Number 68 215 28. The Set Screw to mount the Heat Sink is Part Number 99 022 17.

(Change 16)

TABLE 6.4 MODEL C68–2 CONTROLLER, PARTS LIST

(Sheet 2 of 3)

PART NO. 68 215 70T, 120V, ENGLISH	PART NO. 68 215 71T, 120V, SPANISH
PART NO. 68 215 80T, 240V, ENGLISH	PART NO. 68 215 72T, 120V, FRENCH
PART NO. 68 215 90T, 100V, JAPANESE	PART NO. 68 215 81T, 240V, SPANISH
PART NO. 68 215 83T, 240V, GERMAN	PART NO. 68 215 82T, 240V, FRENCH

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
27		Not Used	
28		Label, Heater Caution	68 208 30
29		Not Used	
30		Clip, Cord	17 725 44
31		Not Used	
32		Button, Plug	22 035 40
33		Scr, 8–32 x 5/8 TR, PH, SS	99 032 57
34		Scr, 10–32 x 1/2 TR, PH, SS, Nylock	99 042 05
35		Scr, 8–32 x 3/4 TR, PH, SS	99 032 85
36		Scr, 4–40 x 3/8 TR, PH, SS	99 011 07
37		Scr, 6–32 x 3/4 TR, PH, SS	99 024 69
38		Nut, 4–40 HX, "KEPS" S, CA	99 103 33
39		Nut, 6–32 HX, "KEPS" S, CAD, PL	99 105 34
40		Not Used	
41		Nut, 3/8–24, HX, JAM, SS	99 111 68
42		Nut, 3/8–24, HX, BR, NI, THIN	99 111 80
43		Wshr, LK, SP, #10, SCA	99 124 16
44		Wshr, 7/16 LK, SHI, S, CA	99 127 41
45		Wshr, 3/8 FL SS .064 THK	99126 70
46		Wshr, Fibre	17 803 40
47		Label, Voltage 120V (not shown)	68 204 40
		Label, Voltage 240V (not shown)	68 204 41
		Label, Voltage 100V (not shown)	68 204 42
48		Wshr, 3/8 LK, SHI, S, CA	99 126 93
49		Wshr, No. 8, LK, SHI, S4	99 122 92
50		Nut, Hex, 15/32–32, UNP 2D	68 215 11
51		Wshr, Flat, 1/2 I.D. x 11/16 O.D. x 0.015 T NYL	99 127 96
52		Not Used	
53**		Scr, 6–32 SE, SK, SS, CP x 1/8 LG	99 022 17
54		Wshr, LK, #10, SP, S, CA	99 124 16
55		Scr, 4–40 x 3/8 TR, PH, SS	99 011 07
56	K1	Relay, Solid State (100 and 120 Vac)	68 903 83
	K1	Relay, Solid State (240 Vac) (VDE)	68 903 84
57		Scr, 10–32 x 3/8 TR, PH, SS	99 041 27
58		Front Panel Assy., Cont. (Refer to Table 6.6 for Parts Breakdown)	
59		Not Used	

**Used only with item 13.

(Change 16)

TABLE 6.4 MODEL C68–2 CONTROLLER, PARTS LIST

(Sheet 3 of 3)

PART NO. 68 215 70T, 120V, ENGLISH
PART NO. 68 215 80T, 240V, ENGLISH
PART NO. 68 215 90T, 100V, JAPANESE
PART NO. 68 215 83T, 240V, GERMAN
PART NO. 68 215 71T, 120V, SPANISH
PART NO. 68 215 72T, 120V, FRENCH
PART NO. 68 215 81T, 240V, SPANISH
PART NO. 68 215 82T, 240V, FRENCH

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
60		Handle, Latch	68 215 15
61		Bushing	68 215 25
62		Spring, Compression	20 016 03
63		Pawl, Latch	68 215 20
64		Ring, Retaining, Wal 5103–25	99 181 45
65		Pin, Spring, 3/32 Dia. x 1.00 LG	99 142 78
66		AC Line Cord, 120V (Not Shown)	17 AZ 100
		AC Line Cord, 220V (Not Shown)	17 AZ 200
67		Air Temperature (Not Shown)	68 209 80
68*		Skin Temperature (Not Shown)	68 209 70
69*		Cover, Probe, Skin Temp. (Box of 100) (Not Shown)	26 901 81
70		Label, Instructions, Motor Installation (Not Shown)	68 216 00
71		Jack (RAM)	17 733 35
		or (68 441 40 Controller Cable Assy)	

* Model C100 only.

(Change 16)

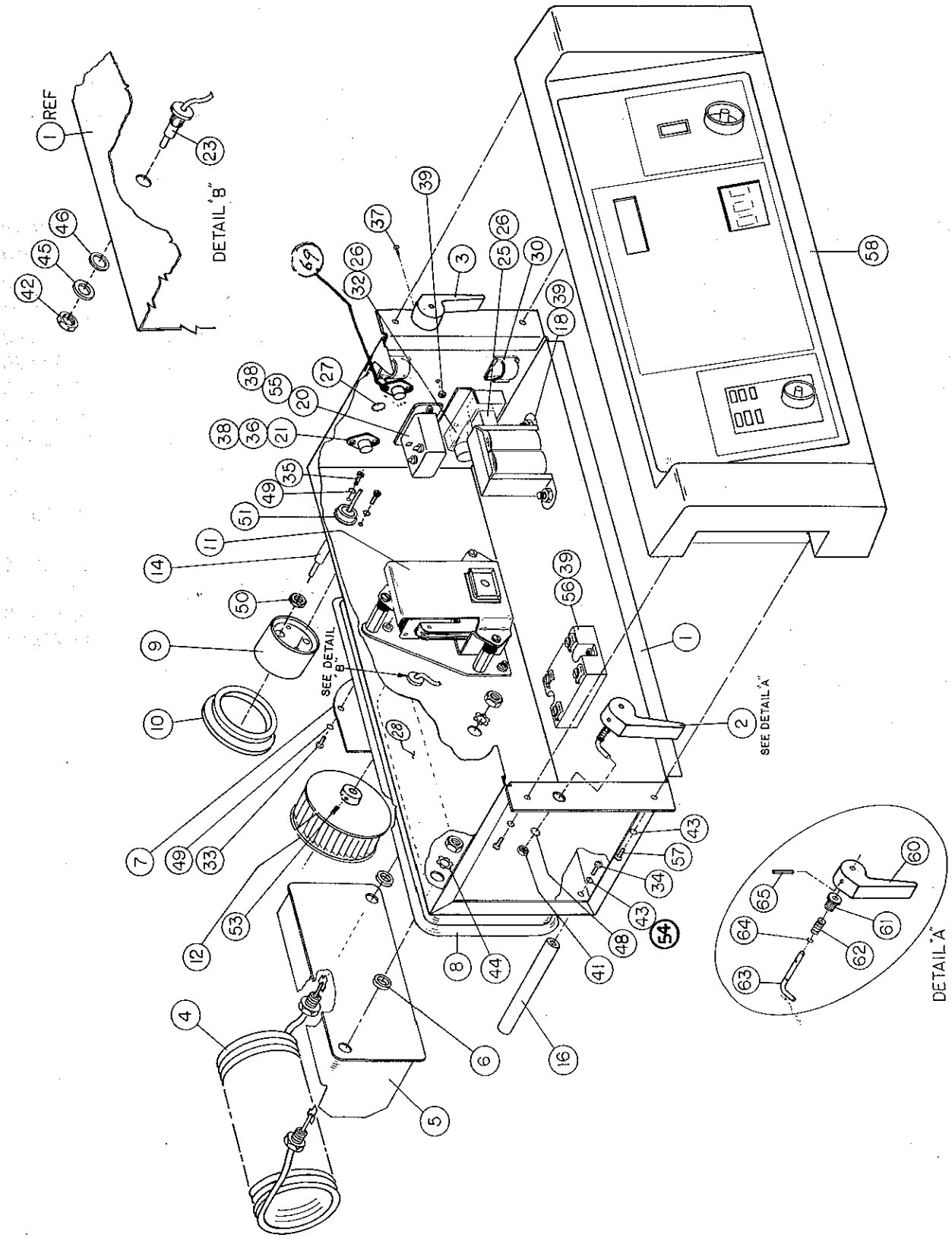

FIGURE 6.5 PARTS LOCATION DIAGRAM, MODEL C82–1 CONTROLLER

(Change 16)

TABLE 6.5 MODEL C82–1 CONTROLLER, PARTS LIST

(Sheet 1 of 3)

PART NO. 68 217 70T, 120V, ENGLISH
PART NO. 68 217 80T, 240V, ENGLISH
PART NO. 68 217 90T, 100V, JAPANESE
PART NO. 68 217 83T, 240V, GERMAN
PART NO. 68 217 71T, 120V, SPANISH
PART NO. 68 217 81T, 240V, SPANISH
PART NO. 68 217 72T, 120V, FRENCH
PART NO. 68 217 82T, 240V, FRENCH

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
		Chassis Assy., 120 Units	68 212 75
		Chassis Assy., 240V Units	68 212 85
		Chassis Assy., 100V Units	68 212 95
1		Chassis, Controller (Weldment)	68 215 10
2		Latch Assy., Left	68 207 80
3		Latch Assy., Right	68 207 81
4	HTR1	Heater, 120V	68 208 25
	HTR1	Heater, 240V	68 208 26
	HTR1	Heater 100V	68 208 27
5		Baffle/Plate, Heater	68 208 20
6		Spacer, Heater Plate	26 516 05
7		Plate, Stiffener	68 204 21
8		Gasket	26 503 00
9		Plug, Thermostat	12 512 01
10		Gasket	26 501 00
11	B1	Motor Replacement Kit, 120V	68 905 70
	B1	Motor Replacement Kit, 220V	68 905 71
12		Impeller	68 205 45
13		Not Used	
14	RT1A & B	Dual Thermistor Assy., Hi–Temp Alarm	68 214 70
15		Not Used	
16		Post, Bumper	68 215 12
17		Not Used	
18	T1	Power Transformer Assy., 120V	68 206 71
T1		Power Transformer Assy., 240V	68 206 77
T1		Power Transformer Assy., 100V	68 206 81
19		Not Used	
20	J14	Connector Assy., Power	68 205 81
21	J7	Receptacle Assy., Air Temperature Probe	68 209 86
22		Not Used	
23	RT4	Thermistor Assy., Air Flow	68 214 80
24		Not Used	
25	CB1	Circuit Breaker, Sgl. Pole, 5 amp (100 and 120 Vac Units)	17 BH 150
26		Circuit Breaker, Sgl. Pole, 5 amp (240 Vac Units)	17 BH 150
27		Button, Plug	22 059 60
28		Label, Heater Caution	68 208 30
29		Not Used	

IMPORTANT NOTE: 220V/240V Models equipped with Gray Oriental Motors. The Heat Sink mounted on the Dual Thermistor, Item 14, is Part Number 68 215 28. The Set Screw to mount the heat sink is Part Number 99 022 17.

(Change 16)

TABLE 6.5 MODEL C82–1 CONTROLLER, PARTS LIST

(Sheet 2 of 3)

PART NO. 68 217 70T, 120V, ENGLISH	PART NO. 68 217 71T, 120V, SPANISH
PART NO. 68 217 80T, 240V, ENGLISH	PART NO. 68 217 81T, 240V, SPANISH
PART NO. 68 217 90T, 100V, JAPANESE	PART NO. 68 217 72T, 120V, FRENCH
PART NO. 68 217 83T, 240V, GERMAN	PART NO. 68 217 82T, 240V, FRENCH

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
30		Clip, Cord	17 725 44
31		Not Used	
32		Button, Plug	22 035 40
33		Scr, 8–32 x 5/8 TR, PH, SS	99 032 57
34		Scr, 10–32 x 1/2 TR, PH, SS, Nylock	99 042 05
35		Scr, 8–32 x 3/4 TR, PH, SS	99 032 85
36		Scr, 4–40 x 3/8 TR, PH, SS	99 011 07
37		Scr, 6–32 x 3/4 TR, PH, SS	99 024 69
38		Nut, 4–40 HX "KEPS" S, CA	99 103 33
39		Nut, 6–32 HX "KEPS" S, CAD, PL	99 105 34
40		Not Used	
41		Nut, 3/8–24, HX, JAM, SS	99 111 68
42		Nut, 3/8–24, HX, BR, NI, THIN	99 111 80
43		Wshr, LK, SP, #10, S CA	99 124 16
44		Wshr, No. 7/16 LK SHI S CA	99 127 41
45		Wshr, 3/8 FL, SS, .064 THK	99 126 70
46		Wshr, Fibre	17 803 40
47		Label, Voltage, 120V (Not Shown)	68 204 40
		Label, Voltage, 240V (Not Shown)	68 204 41
		Label, Voltage, 100V (Not Shown)	68 204 42
48		Wshr, 3/8 LK SHI, S, CA	99 126 93
49		Wshr, No. 8, LK, SHI, S4	99 122 92
50		Nut, Hex,	99 115 20
51		Wshr, Flat, 1/2 I.D. x 11/16 O.D. x 0.015 T NYL	99 127 96
52		Not Used	
53**		Scr, 6–32 SE SK SS CP x 1/8 LG	99 022 17
54		Wshr, LK, #10 SP, S, CA	99 124 16
55		Scr, 4–40 x 3/8 TR, PH, SS	99 011 07
56	K1	Relay, Solid State (100 and 120 Vac)	68 903 83
	K1	Relay, Solid State (240 Vac) (VDE)	68 903 84
57		Scr, 10–32 x 3/8 TR, PH, SS	99 041 27
58		Front Panel Assy., Cont. (Refer to Table 6.7 for Parts Breakdown)	
59		Not Used	
60		Handle, Latch	68 215 15
61		Bushing	68 215 25
62		Spring, Compression	20 016 03

**Used only with Item 13.

(Change 16)

TABLE 6.5 MODEL C82–1 CONTROLLER, PARTS LIST

(Sheet 3 of 3)

PART NO. 68 217 70T, 120V, ENGLISH
PART NO. 68 217 71T, 120V, SPANISH
PART NO. 68 217 80T, 240V, ENGLISH
PART NO. 68 217 81T, 240V, SPANISH
PART NO. 68 217 90T, 100V, JAPANESE
PART NO. 68 217 72T, 120V, FRENCH
PART NO. 68 217 83T, 240V, GERMAN
PART NO. 68 217 82T, 240V, FRENCH

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
63		Pawl, Latch	68 215 20
64		Ring, Retaining, WAL 5103–25	99 181 45
65		Pin, Spring, 3/32 Dia, x 1.00 LG	99 142 78
66		AC Line Cord, 120V (Not Shown)	17 AZ 100
		AC Line Cord, 220V (Not Shown)	17 AZ 200
67		Air Temperature Probe (Not Shown)	68 209 80
68		Label, Instructions, Motor Installation (Not Shown)	68 216 00
69		Jack (RAM)	17 733 35
		or (68 441 40 Controller Cable Assy)	

(Change 16)

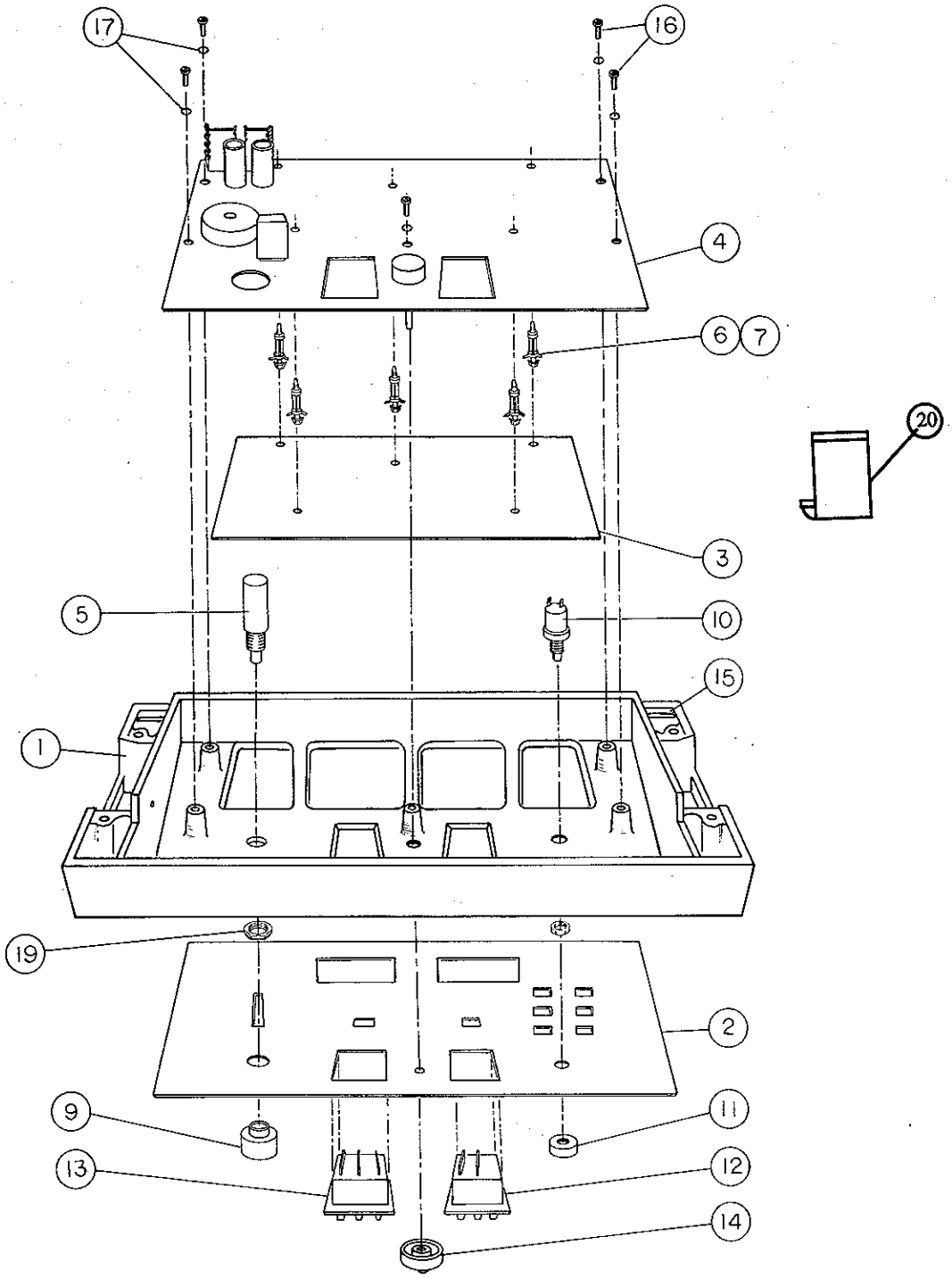

FIGURE 6.6 PARTS LOCATION DIAGRAM, MODEL C68–2 CONTROLLER FRONT PANEL

TABLE 6.6 MODEL C68–2 CONTROLLER FRONT PANEL, PARTS LIST

PART NO. 68 211 75T (English Label)
PART NO. 68 211 76T (Spanish Label)
PART NO. 68 211 77T (French Label)
PART NO. 68 211 78T (German Label)
PART NO. 68 211 79T (Japanese Label)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		Housing, Controller	68 215 00
2		Nameplate, English	68 215 65
		Nameplate, Spanish	68 215 66
		Nameplate, French	68 215 67
		Nameplate, German	68 215 68
		Nameplate, Japanese	68 215 69
3	PCB1	Display (LED) Board	68 350 71T
4*	PCB2	Temp Cont & Alarm Logic Board	68 905 74
5	S1	Power Switch, Replacement Kit	68 901 73
6		Support, PCB (P/O Item 3)	17 AZ 534
7		Scr, 6–32 x 1/4 TR, PH, SS (P/O item 3)	99 022 72
8		Not Used	
9		Guard, Switch, Replacement Kit	68 901 74
10	S2	Reset Switch Assy.	68 210 75
11		Guard, Switch	17 061 88
12	S5	Skin Temp Switch Assy.	68 203 70
13	S4	Air Temp Switch Assy.	68 203 71
14		Knob, Instr., Skirted, Pointer	17 061 89
15		Gasket, Front Panel	68 215 40
16		Scr, 6–32 x 3/8 RD, PH, SS	99 023 26
17		Wshr, No. 6 LK, SHI, S4	99 122 19
18		Not Used	
19		Nut, Mounting, Switch (M14 x 1.0)	17 061 91
20		Ribbon Cable, Flat Flex, Crkt 20 Position PCB1 to PCB2	17 730 82

* PCB2 Part No. 68 351 71 for Model C68–2 Series 00 Controllers are no longer available. Order Retrofit Kit 68 905 74.

(Change 16)

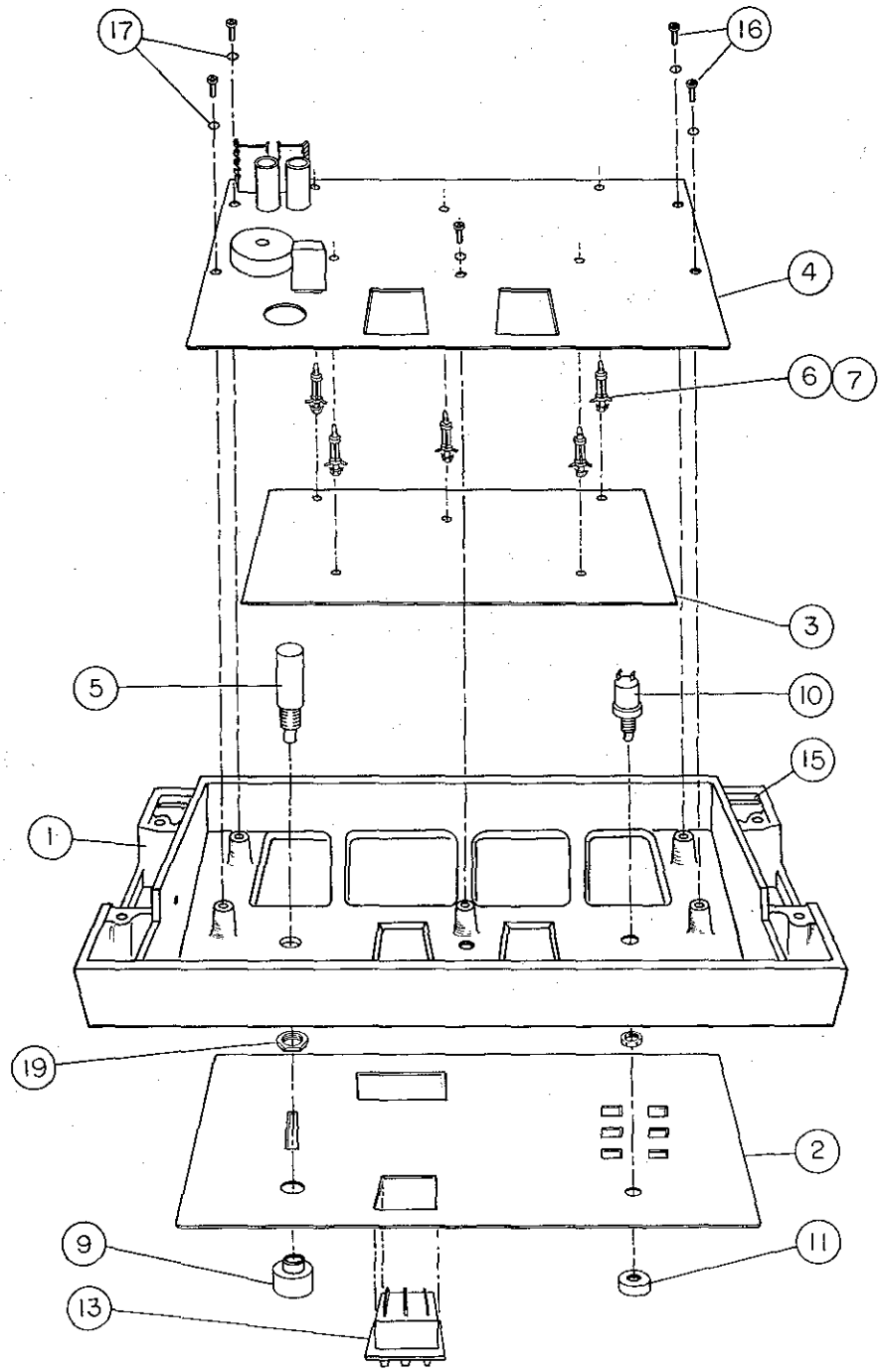

FIGURE 6.7 PARTS LOCATION DIAGRAM, MODEL C82–1 CONTROLLER, FRONT PANEL

TABLE 6.7 MODEL C82–1 CONTROLLER FRONT PANEL, PARTS LIST

PART NO. 68 216 70T (English Label)
PART NO. 68 216 71T (Spanish Label)
PART NO. 68 216 72T (French Label)
PART NO. 68 216 73T (German Label)
PART NO. 68 216 74T (Japanese Label)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		Housing, Controller	68 215 00
2		Name Plate, English	68 216 30
		Name Plate, Spanish	68 216 31
		Name Plate, French	68 216 32
		Name Plate, German	68 216 33
3	PCB1	Display (LED) Board	68 350 75T
4*	PCB2	Temp Cont & Alarm Logic Board	68 905 75
5	S1	Power Switch, Replacement Kit	68 901 73
6		Support, PCB (P/O Item 3)	17 AZ 534
7		Scr, 6–32 x 1/4 TR, PH, SS (P/O item 3)	99 022 72
8		Not Used	
9		Guard, Switch, Replacement Kit	68 901 74
10	S2	Reset Switch Assy.	68 210 75
11		Guard, Switch	17 061 88
12		Not Used	
13	S4	Air Temp Switch Assy.	68 203 71
14		Not Used	
15		Gasket, Front Panel	68 215 40
16		Scr, 6–32 x 3/8 RD, PH, SS	99 023 26
17		Wshr, No. 6 LK, SHI, S4	99 122 19
18		Not Used	
19		Nut, Mounting, Switch (M14 x 1.0)	17 061 91
20		Ribbon Cable, Flat Flex, Crkt 20 Position PCB1 to PCB2	17 730 82

*PCB2 Part No. 68 351 75 for Model C82–1 Series 00 Controllers are no longer available. Order Retrofit Kit 68 905 75.

(Change 16)

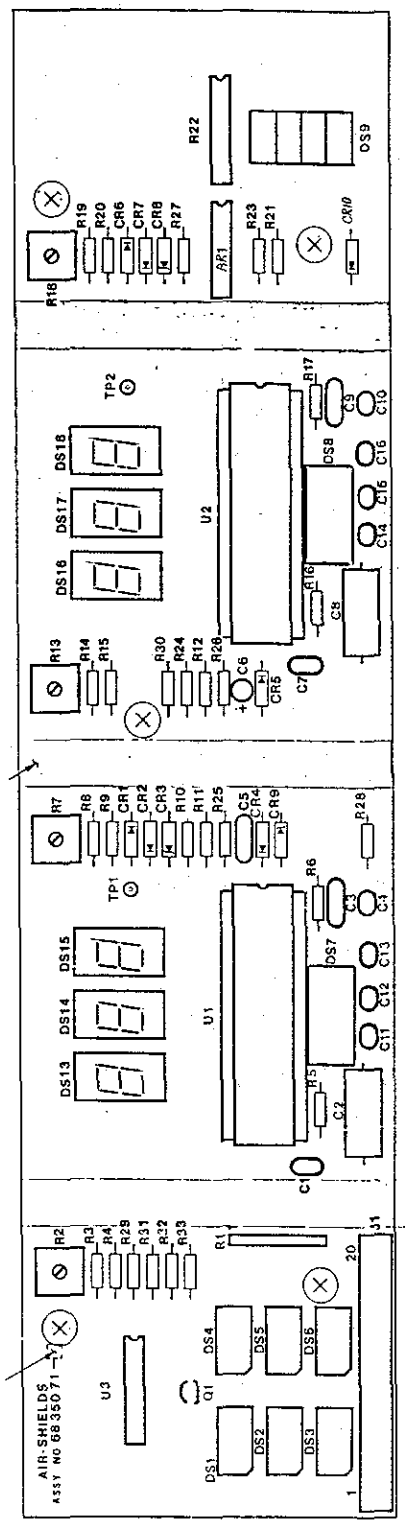

FIGURE 6.8 PARTS LOCATION DIAGRAM, DISPLAY BOARD PCB1–MODEL C68–2 CONTROLLER

(Change 13)

TABLE 6.8 PCB1–MODEL C68–2 CONTROLLER DISPLAY BOARD, PARTS LIST

(Sheet 1 of 2)

PART NO. 68 350 71T

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		Not Used	
2		Not Used	
3		Not Used	
4		Not Used	
5		Not Used	
6		Not Used	
7		Not Used	
8		Not Used	
9		Not Used	
10		Not Used	
11		Support, PCB, INTL THD .50 LG	17 AZ 534
12		SC 6–32 x 1/4 TR, PH, SS	99 022 72
13	J1	Conn. Recpt, PC Flat Cable, 20 Posn	17 BP 074
14		Not Used	
15*	C3, C9	Cap, 1.0 MFD, 20%, 50V	17 BF 224
	C3, C9	Cap, 0.10 MFD, 20%, 50V (Rev. 1 PCB Only)	17 430 57
16*	C1, C7	Cap, 0.047 MFD 10%, 50V	17 BF 257
	C1, C7	Cap, 0.01 MFD, +80 MFD, –20%, 50V (Rev. 1 & 2 PCB Only)	17 BF 388
17	C11, C12, C13, C14, C15, C16,	Cap, 0.001 MFD, 10%, 50V	17 BF 377
18	C5,	Cap, 0.10 MFD, 20%, 50V	17 430 57
19	C2, C8	Cap, 0.22 MFD, 5%, 100V	17 AY 085
20*	C4, C10	Cap, 100 PFD, 10%, 50V	17 BF 365
	C4, C10	Cap, 0.001 MFD, 10%, 50V (Rev. 1 PCB Only)	17 BF 377
21	C6	Cap, 3.9 PFD, 10%, 15V	17 AW 223
22		Diode, Schottky, 1N5711	17 502 71
23*	CR1, CR6	Diode, IN34A	17 500 20
	CR1, CR6	Diode, 1N914 (Rev. 1 PCB Only)	17 AR 500
24	CR10	Diode, Schottky, 1N5711	17 502 71
25	CR2, CR4, CR5, CR7	Diode, 1N914	17 AR 500
26*	CR3, CR8, CR9	Diode, Zener, 1N752A, 5.6V, Motorola only	17 502 60
	CR9	Diode, Zener, IN4740A, 10V 5%, IW (Rev. 1 & 2 PCB Only)	17 500 10
27	U3	Integ. Crkt, 4050	17 630 01
28	AR1	Integ. Crkt, LM324AN	17 631 45
29	U1, U2	Integ, Crkt, 7107	17 630 75
30	DS13, DS14, DS15, DS16, DS17, DS18	Display, LED, Orn	17 BE 247
31	DS1, DS2, DS3, DS5,DS6	Lamp, LED, Red	17 807 00
32	DS9	Lamp, LED, Yel	17 BE 252

* See page 2 at the front of this manual for information on modification kits.

(Change 16)

TABLE 6.8 PCB1, MODEL C68–2 CONTROLLER DISPLAY BOARD, PARTS LIST

(Sheet 2 of 2)

PART NO. 68 350 71T

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
33	DS7, DS8	Lamp, LED, Green	17 BE 240
34		Not Used	
35	R2, R7, R13		
	R18	Res, Var, 500 ohms, 0.5W, VRT ADJ	17 AN 011
36		Not Used	
37		Not Used	
38	R1	Res. Network, SIP 470 ohms, 5%, 1/8W	17 AU 025
39	R22	Res, Network, DIP, 390 ohms, 2% 1/75W	17 AU 560
40		Not Used	
41	R10	Res, 51 ohms, 5%, 1/4W	17 AA 124
42	R29, R30, R33	Res, 220 ohms, 5%, 1/4W	17 AA 169
43	R28	Res, 300 ohms, 5%, 1/4W	17 AA 178
44	R27	Res, 33K, 5%, 1/4W	17 AA 325
	R27	Res, 20K, 5%, 1/4W (Rev. 1 PCB Only)	17 AA 310
45*	R24, R34	Res, 330 ohms, 5%, 1/4W	17 AH 721
	R24	Res, 47 Ohms, 5%, 1/4W (Rev. 1& 2 PCB Only)	17 AA 121
	R34	Not Used (Rev. 1 & 2 PCB Only)	
46	R32	5.1K, 5%, 1/4W	17 AA 268
47		Not Used	
48	R23	Res, 182 ohms, 1%, 1/8W	17 AF 121
49	R3, R14	Res, 1.50K, 1%, 1/8W	17 AF 209
50	R8, R19	Res, 2.00K, 1%, 1/8W	17 AF 221
51	R21	Res, 3.09K, 1%, 1/8W	17 AF 239
52	R12, R26	Res, 10.00K, 1%, 1/8W	17 AF 288
53	R11, R25, R31	Res, 15.00K, 1%, 1/8W	17 AF 305
54	R4, R9, R15,		
	R20	Res, 20.00K, 1%, 1/8W	17 AF 317
55*	R6, R17	Res, 100K, 1%, 1/8W	17 AF 384
	R6, R17	Res, 36.5K, 1%, 1/8W (Rev. 1 & 2 PCB Only)	17 AF 342
56*	R5, R16	Res, 475K, 1%, 1/8W	17 AF 449
	R5, R16	Res, 2.21M, 1%, 1/8W (Rev. 1 & 2 PCB Only)	17 AF 513
57		Not Used	
58		Not Used	
59	Q1	Transistor, 2N4124	17 625 58
60		Cable Ribbon, Flat Flex, Crkt 20 Position PCB1 to PCB2	17 730 82

* See page 2 at the front of this manual for information on modification kits.

(Change 16)

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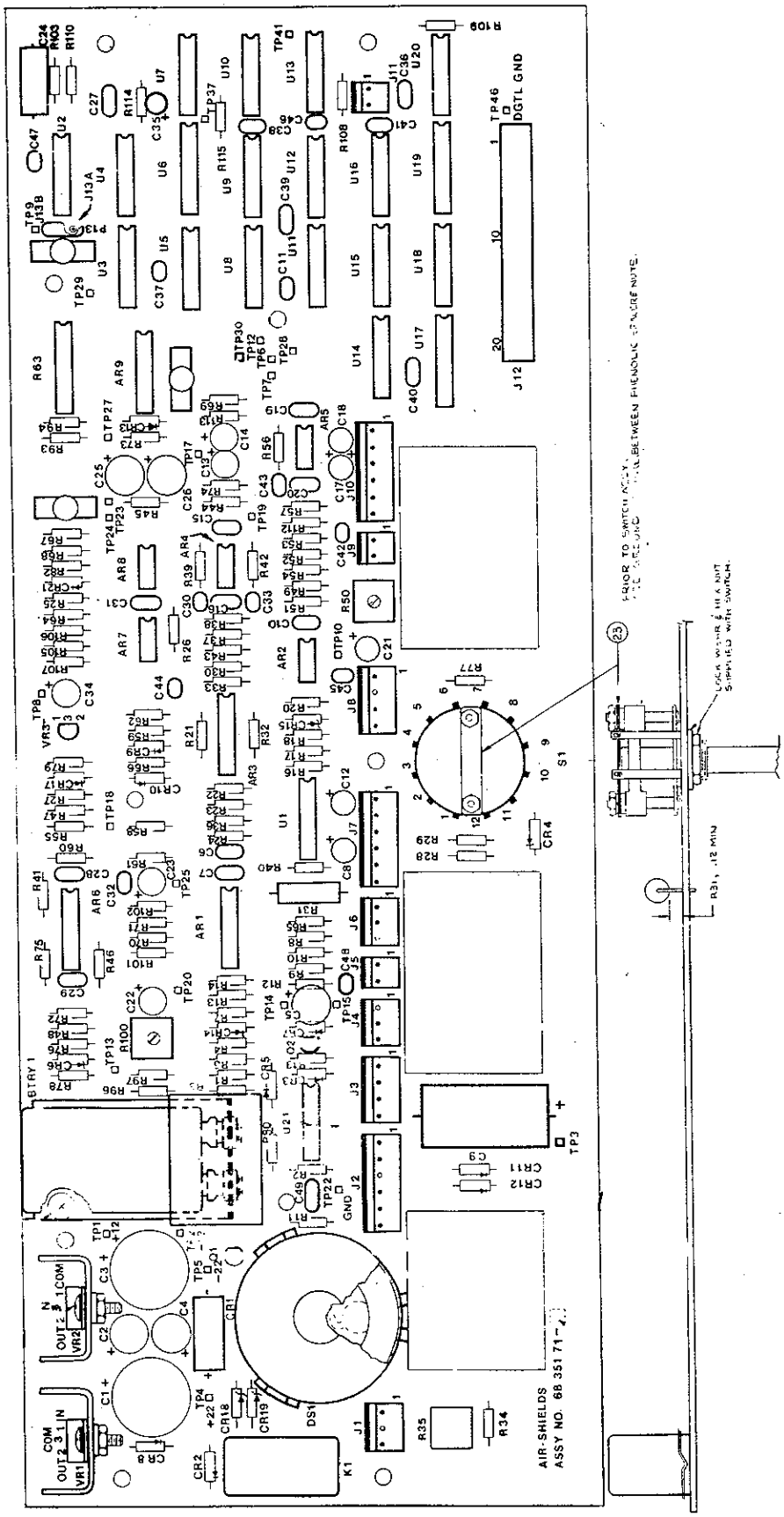

FIGURE 6.9 PARTS LOCATION DIAGRAM, TEMPERATURE CONTROL AND ALARM LOGIC PCB2 – MODEL C68–2 SERIES 00 CONTROLLER
(Change 16)

TABLE 6.9 PCB2, MODEL C68–2 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC , PARTS LIST

(Sheet 1 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		This PCB Assembly is no longer available, order Retrofit Kit	68 905 74
2		Not Used	
3		Not Used	
4		Not Used	
5		Not Used	
6		Not Used	
7		Not Used	
8		Not Used	
9		Not Used	
10		Not Used	
11		Heat Sink	17 061 14
12		Insulator, Transistor, Thrm Cndct	17 061 19
13		Holder, Btry, PCB Mtg.	17 806 99
14		Battery, 7.2V, Rechargeable	17 807 65
15		Not Used	
16	DS1	Transducer, Tone Replacement Kit	68 903 89
17		Not Used	
18		Scr, 4–40 x 3/8 TR, PH, SS	99 011 07
19		Nt. 4–40 HX, KEPS, S, CAD	99 103 33
20		Wshr, No. 4 FL, NY	99 121 23
21		Scr, 4–40 x l/4 TR, PH, SS	99 010 56
22		Nut, 4–40 HX, SS	99 103 35
23		Strap, Grounding	68 351 30
24	C30, C33, C42 C43, C44, C45,C47,	Cap, 0.001 MFD, 10%, 50V	17 BF 377
25	C6, C7, C10, C15, C16, C19, C20, C27, C28, C29, C31, C36, C38, C39, C40, C41	Cap, 0.01 MFD +80%, –20%, 50V	17 BF 388
26	C11, C32, C37 C46, C48	Cap, 0.10 MFD, 20%, 50V	17 BF 217
27	C35	Cap, 0.33 MFD, 10%, 50V	17 AW 206
28	C24	Cap, 0.56 MFD, 5%, 100V	17 AY 100

(Change 16)

TABLE 6.9 PCB2, MODEL C68–2 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC , PARTS LIST

(Sheet 2 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
29	C8, C12, C13, C14, C17, C18, C21, C22, C23, C34	Cap, 4.7 MFD, 10% 35V	17 AW 224
30	C2, C4, C5, C25, C26	Cap, 56 MFD, 10%, 15V	17 AW 257
31	C1	Cap, 1000 MFD, +50 –10%, 35V	17 AW 853
32	C9	Cap, 1000 MFD, +50 –20%, 16V	17 405 34
33	C3	Cap, 470 MFD, +50 –10%, 35V	17 AW 833
34		Not Used	
35		Not Used	
36		Not Used	
37		Not Used	
38		Not Used	
39		Not Used	
40		Not Used	
41	J5, J9, J11	Conn, Rcpt, Male 2 Posn	17 BP 025
42	J1, J4, J6	Conn, Rcpt, Male 3 Posn	17 BP 026
43	J3, J8	Conn, Rcpt, Male, 4 Posn	17 BP 027
44			Not Used
45	J2, J7	Conn, Rcpt, Male, 6 Posn	17 BP 029
46	J12	Conn, Rcpt, Female, 20 Posn	17 BP 074
47		Not Used	
48		Not Used	
49		Not Used	
50		Not Used	
51	CR3, CR5, CR7, CR8, CR9, CR10, CR13, CR21	Diode, 1N914	17 AR 500
52	CR14	Diode, Zener, IN4744A, 15V	17 502 38
53	CR2, CR11, CR12	Diode, 1N4001	17 AS 000
54	CR15	Diode, Zener, 1N4736A, 6.8V	17 501 68
55	CR4	Diode, Zener, 1N4730A, 3.9V	17 AR 005
56	CR6, CR17	Diode, Zener, 1N5231B, 5.1V	17 502 08
57	CR18, CR19	Diode, Zener, 1N4742A, 12.0V	17 502 21
58		Not Used	
59		Not Used	
60		Not Used	

TABLE 6.9 PCB2, MODEL C68–2 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC , PARTS LIST

(Sheet 3 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
61	U2, U7, U15	I.C. 4001	17 629 75
62	U9, U11, U13, U18	I.C. 4011	17 629 77
63	U4, U5, U8, U10, U12	I.C. 4013	17 629 57
64	U14	I.C. 4023	17 629 83
65	U3	I.C. 4024	17 629 84
66	U20	I.C. 4025	17 629 85
67	U17, U19	I.C. 4027	17 629 86
68	U6	I.C. 4520	17 631 34
69	U16, U21	I.C. 4069	17 629 92
70	U1	I.C. 4066	17 630 76
71	AR2, AR5, AR7	I.C. 1458	17 629 36
72	AR1, AR3, AR9	I.C. 3302	17 629 58
73	AR6	I.C. 3403	17 629 70
74	AR8	I.C. TL081CP	17 630 77
75	AR4	I.C. 358A	17 631 85
76		Not Used	
77		Not Used	
78		Not Used	
79		Not Used	
80		Not Used	
81	R35, R50	Res, Var, 500 ohms, 0.5W, VRT ADJ	17 AN 186
82	R100	Res, Var, 20K, 0.5W, VRT ADJ	17 AN 021
83		Not Used	
84		Not Used	
85		Not Used	
86		Not Used	
87		Not Used	
88	P13	Conn, Jumper Plug, Female	17 730 12
89		Not Used	
90		Not Used	
91	CR1	Rectifier, Bridge, 1.5A	17 AS 201
92		Not Used	
93		Not Used	
94	VR1	Rgltr, V, 78M12UC (+12V)	17 AT 003
95	VR2	Rgltr, V, 79M12AUC (–12V)	17 AT 013

*R50 is 500 ohms, 0.5W (P/N 17 AN 011) on PCB2 68 351 71–5; R50 is 2.0K, 0.5W (P/N 17 AN 427) on PCB2 68 351 71–6.

(Change 13)

TABLE 6.9 PCB2, MODEL C68–2 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC , PARTS LIST

(Sheet 4 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
96	VR3	Rgltr, V, 78LO5AWC (+5V)	17 AT 041
97		Not Used	
98		Not Used	
99	K1	Relay, SPDT, 12V, 10A	17 652 66
100	R64	Res, 100 Ohm, 5%, 1/4W	17 AH 697
101	R11	Res, 160K, 5%, 1/4W	17 AH 851
102	R23, R65	Res, 5.1K, 5%, 1/4W	17 AH 779
103	R1, R27, R32, R48, R58, R67, R69, R70, R78, R82, R93, R94, R101, R107, R113, R80	Res, 10K, 5%, 1/4W	17 AH 793
104	R3	Res, 12K, 5%, 1/4W	17 AH 797
105	R79	Res, 20K, 5%, 1/4W	17 AH 807
106		Not Used	
107	R71, R76	Res, 51K, 5%, 1/4W	17 AH 827
108	R72, R75	Res, 100K, 5%, 1/4W	17 AH 841
109	R25	Res, 200K, 5%, 1/4W	17 AH 855
110	R68	Res, 2.2M, 5%, 1/4W	17 AH 905
111	R2	Res, 3.9M, 5%, 1/4W	17 AH 917
112	R31	Res, 120 Ohm, 5%, 2W	17 AD 151
113		Not Used	
114	R19	Res, 845 Ohm, 1%, 1/8W	17 AF 185
115	R29, R42, R43, R56, R57	Res, 2.00K, 1%, 1/8W	17 AF 221
116	R16	Res, 3.57K, 1%, 1/8W	17 AF 245
117	R55	Res, 4.02K, 1%, 1/8W	17 AF 250
118	R36, R51	Res, 4.12K, 1%, 1/8W	17 AF 251
119	R28, R66, R115	Res, 4.99K, 1%, 1/8W	17 AF 259
120	R4, R14, R45	Res. 6.04K, 1%, 1/8W	17 AF 267
121	R34, R49	Res, 8.87K, 1%, 1/8W	17 AF 283
122	R17, R24, R30, R37, R38, R40, R52, R53, R97, R102, R105, R106, R109, R112	Res, 10.00K, 1%, 1/8W	17 AF 288

TABLE 6.9 PCB2, MODEL C68–2 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC , PARTS LIST

(Sheet 5 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
123	R47	Res, 10.20K, 1%, 1/8W	17 AF 289
124	R7, R20*, R59	Res, 14.00K, 1%, 1/8W	17 AF 302
125	R44, R77, R21	Res, 15.00K, 1%, 1/8W	17 AF 305
126	R8, R13, R22, R33, R60*, R62, R96, R74	Res, 20.00K, 1%, 1/8W	17 AF 317
127	R26	Res, 24.90K, 1%, 1/8W	17 AF 326
128	R39, R54	Res, 31.60K, 1%, 1/8W	17 AF 336
129**	R20	Res, 13.7K, 1%, 1/8W	17 AF 301
130	R10	Res, 45.30K, 1%, 1/8W	17 AF 351
131	R18, R61, R5	Res, 49.90K, 1%, 1/8W	17 AF 355
132	R9	Res, 60.40K, 1%, 1/8W	17 AF 363
133	R41, R46, R110	Res, 100.00K, 1%, 1/8W	17 AF 384
134	R73	Res, 249.00K, 1%, 1/8W	17 AF 422
135**	R60	Res, 17.8K, 1%, 1/8W	17 AF 312
136	R12, R108, R114	Res, 1.00M, 1%, 1/8W	17 AF 480
137	R103	Res, 1.18M, 1%, 1/8W	17 AF 487
138	R63	Res, Ntwk, 10K, 2%, 1.75W, 16 DIP	17 AU 530
139	S1	Switch, Rotary, 4 PDT	17 682 05
140		Not Used	
141	J13A, J13B	Contact, Male Pin, PC Mtg. .040 DIA	17 730 13
142	TP6, TP7 TP10, TP12 TP13, TP14 TP15, TP17 TP18, TP19 TP20, TP22 TP23, TP24 TP25, TP27 TP28, TP29 TP30, TP46	Socket Lead	17 731 09
143		Not Used	
144		Not Used	
145	Q1	Transistor, A8T404–A, PNP	17 627 86
146	Q2	Transistor, 2N4124, NPN	17 625 58
147****		Alarm Enable Plug Assy	68 351 40

*PCB2 Rev. 2 and below unless Retrofit Kit P/N 68 902 70 has been installed. If kit is installed, see items 129 (R20) and 135 (R60) for value and P/N of resistors. See also page 2.

**PCB2 Rev. 3 and above.

***R54 is 31.6K, 1%, 1/8W (P/N 17 AF 336) on PCB2 68 351 71–5;R54 is 69.8K, 1%, 1/8W (P/N 17 AF 369) on PCB2 68 351 71–6.

****If no RAM is installed, connect Alarm Enable Plug Assy to J10 on PCB2.

(Change 16)

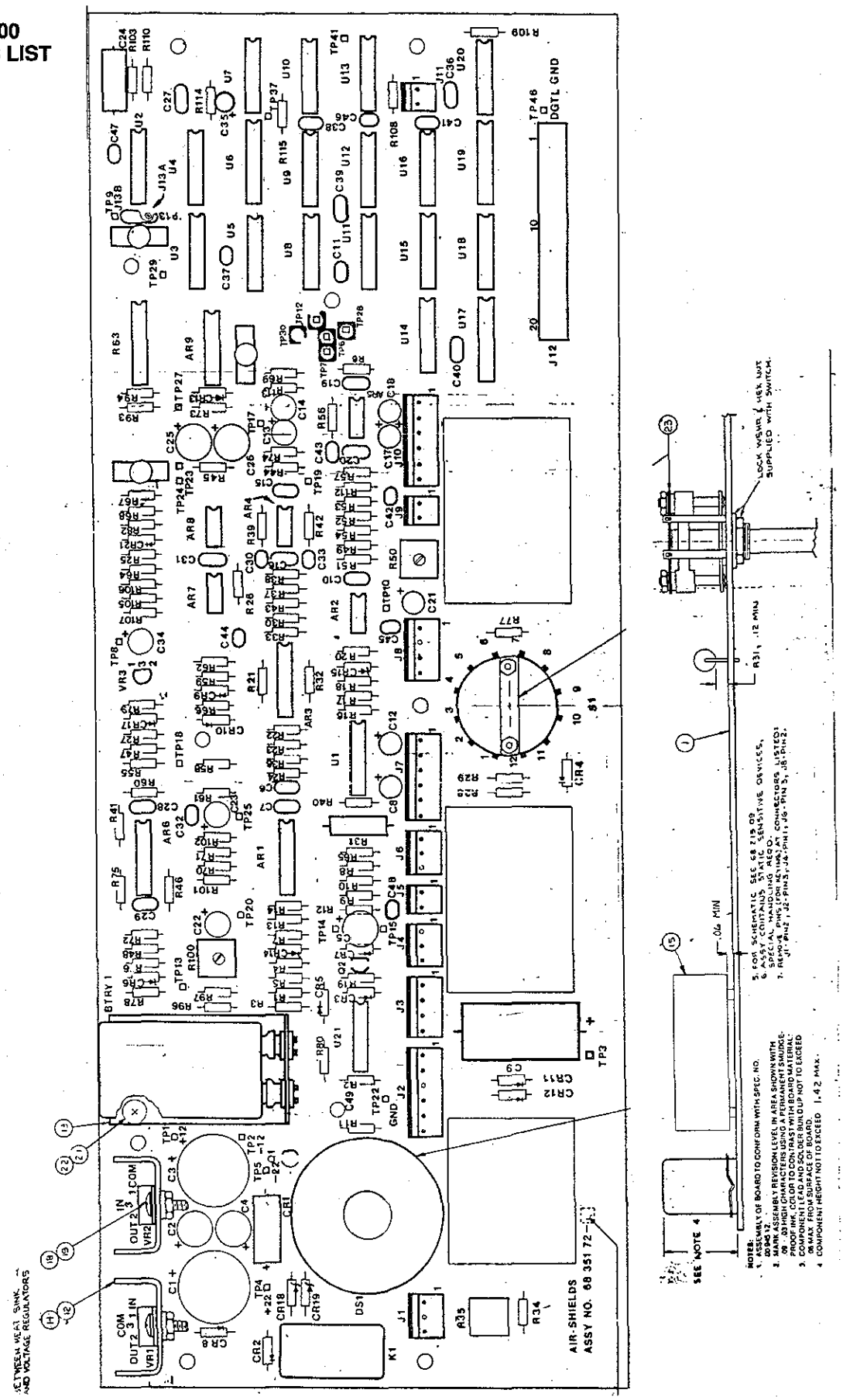
AIR-SHIELDS
ASSY NO. 68 351 72-01
DGTL GND
SEE NOTE 4
LOCK WSHR & HEX NUT SUPPLIED WITH SWITCH.
.06 MIN
.12 MIN
NOTES:
1. ASSEMBLY OF BOARD TO CONFORM WITH SPEC. NO. 00340 12.
2. MARK ASSEMBLY REVISION LEVEL IN AREA SHOWN WITH 00 AS ORIGINAL ISSUE LEVEL. PERMANENT SMUDGE-PROOF INK, COLOR TO CONTRAST WITH BOARD MATERIAL.
3. COMPONENT LEAD AND SOLDER BUILDUP NOT TO EXCEED .06 MAX. FROM SURFACE OF BOARD.
4. COMPONENT HEIGHT NOT TO EXCEED 1.42 MAX.
5. FOR SCHEMATIC, SEE 68 [illegible] 00
6. ESD SENSITIVE DEVICES, SPECIAL HANDLING REQ'D.
7. REMOVE PINS FROM MATING AT CONNECTORS LISTED: J1-PIN 2, J2-PINS 1, J4-PIN 1, J6-PIN 3, J8-PIN 2.

FIGURE 6.10 PARTS LOCATION DIAGRAM, TEMPERATURE CONTROL AND ALARM LOGIC PCB2 – MODEL C68–2 SERIES 01 CONTROLLER

TABLE 6.10 PCB2, MODEL C68–2 SERIES 01 CONTROLLER TEMP. CONT. AND ALARM LOGIC, PARTS LIST

(Sheet 1 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		PCB Assembly	68 905 74
2		Not Used	
3		Not Used	
4		Not Used	
5		Not Used	
6		Not Used	
7		Not Used	
8		Not Used	
9		Not Used	
10		Not Used	
11		Heat Sink	17 061 14
12		Insulr,Transistor, Thrm Cndct	17 061 19
13		Holder, Btry, PCB Mtg.	17 806 99
14		Battery, 7.2V, Rechargeable	17 807 65
15		Not Used	
16	DS1	Transducer, Tone Replacement Kit	68 903 89
17		Not Used	
18		Scr, 4–40 x 3/8 TR, PH, SS	99 011 07
19		Nt. 4–40 HX, KEPS, S, CAD	99 103 33
20		Not Used	
21		Scr, 4–40 x I/4 TR, PH, SS	99 010 56
22		Nt, 4–40 HX, SS	99 103 35
23		Strap, Grounding	68 351 30
24	C30, C33, C42 C43, C44, C45, C47, C49	Cap, 0.001 MFD, 10%, 50V	17 BF 377
25	C6, C7, C10, C15, C16, C19, C20, C27, C28, C29, C31, C36, C38, C39, C40, C41	Cap, 0.01 MFD +80%, –20%, 50V	17 BF 388
26	C11, C32, C37 C46, C48	Cap, 0.10 MFD, 20%, 50V	17 BF 217
27	C35	Cap, 0.33 MFD, 10%, 50V	17 AW 206
28	C24	Cap, 0.56 MFD, 5%, 100V	17 AY 100

(Change 16)

TABLE 6.10 PCB2, MODEL C68–2 SERIES 01 CONTROLLER TEMP. CONT. AND ALARM LOGIC, PARTS LIST

(Sheet 2 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
29	C8, C12, C13, C14, C17, C18, C21, C22, C23, C34	Cap, 4.7 MFD, 10% 35V	17 AW 224
30	C2, C4, C5, C25, C26	Cap, 56 MFD, 10%, 15V	17 AW 257
31	C1	Cap, 1000 MFD, +50 –10%, 35V	17 AW 853
32	C9	Cap, 1000 MFD, +50 –20%, 16V	17 405 34
33	C3	Cap, 470 MFD, +50 –10%, 35V	17 AW 833
34	C17,C18	Cap, 2.2 MFD, 10%, 50V	17 AN 218
35	C2,C4	Cap, 56 uF, 10%, 25V	17 AW 256
36		Not Used	
37		Not Used	
38		Not Used	
39		Not Used	
40		Not Used	
41	J5, J9, J11	Conn, Rcpt, Male 2 Posn	17 BP 025
42	J1, J4, J6	Conn, Rcpt, Male 3 Posn	17 BP 026
43	J3, J8	Conn, Rcpt, Male, 4 Posn	17 BP 027
44		Not Used	
45	J2, J7,J10	Conn, Rcpt, Male, 6 Posn	17 BP 029
46	J12	Conn, Rcpt, Female, 20 Posn	17 BP 074
47		Not Used	
48		Not Used	
49		Not Used	
50		Not Used	
51	CR3, CR5, CR7, CR8, CR9, CR10, CR13, CR21	Diode, 1N914	17 AR 500
52	CR14	Diode, Zener, IN4744A, 15V	17 502 38
53	CR2, CR11, CR12	Diode, 1N4001	17 AS 000
54	CR15	Diode, Zener, 1N4736A, 6.8V	17 501 68
55	CR4	Diode, Zener, 1N4730A, 3.9V	17 AR 005
56	CR6, CR17	Diode, Zener, 1N5231B, 5.1V	17 502 08
57	CR18, CR19	Diode, Zener, 1N4742A, 12.0V	17 502 21
58		Not Used	
59		Not Used	
60		Not Used	

TABLE 6.10 PCB2, MODEL C68–2 SERIES 01 CONTROLLER TEMP. CONT. AND ALARM LOGIC, PARTS LIST

(Sheet 3 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
61	U2, U7, U15	I.C. 4001	17 629 75
62	U9, U11, U13, U18	I.C. 4011	17 629 77
63	U4, U5, U8, U10, U12	I.C. 4013	17 629 57
64	U14	I.C. 4023	17 629 83
65	U3	I.C. 4024	17 629 84
66	U20	I.C. 4025	17 629 85
67	U17, U19	I.C. 4027	17 629 86
68	U6	I.C. 4520	17 631 34
69	U16, U21	I.C. 4069	17 629 92
70	U1	I.C. 4066	17 630 76
71	AR2, AR5, AR7	I.C. 1458	17 629 36
72	AR1, AR3, AR9	I.C. 3302	17 629 58
73	AR6	I.C. 3403	17 629 70
74	AR8	I.C. TL081CP	17 630 77
75	AR4	I.C. 358A	17 631 85
76		Not Used	
77		Not Used	
78		Not Used	
79		Not Used	
80		Not Used	
81	R35	Res, Var, 500 ohms, 0.5W, VRT ADJ	17 AN 186
82	R100	Res, Var, 20K, 0.5W, VRT ADJ	17 AN 021
83		Not Used	
84		Not Used	
85		Not Used	
86		Not Used	
87		Not Used	
88	P13	Conn, Jumper Plug, Female	17 730 12
89		Not Used	
90		Not Used	
91	CR1	Rectifier, Bridge, 1.5A	17 AS 201
92		Not Used	
93		Not Used	
94	VR1	Rgltr, V, 78M12UC (+12V)	17 AT 003
95	VR2	Rgltr, V, 79M12AUC (–12V)	17 AT 013

(Change 13)

TABLE 6.10 PCB2, MODEL C68–2 SERIES 01 CONTROLLER TEMP. CONT. AND ALARM LOGIC, PARTS LIST

(Sheet 4 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
96	VR3	Rgltr, V, 78LO5AWC (+5V)	17 AT 041
97		Not Used	
98		Not Used	
99	K1	Relay, SPDT, 12V, 10A	17 652 66
100	R64	Res, 100 Ohm, 5%, 1/4W	17 AH 697
101	R11	Res, 160K, 5%, 1/4W	17 AH 851
102	R23, R65	Res, 5.1K, 5%, 1/4W	17 AH 779
103	R1, R27, R32, R48, R58, R67, R69, R70, R78, R82, R93, R94, R101, R107, R113, R80	Res, 10K, 5%, 1/4W	17 AH 793
104	R3	Res, 12K, 5%, 1/4W	17 AH 797
105	R79	Res, 20K, 5%, 1/4W	17 AH 807
106		Not Used	
107	R71, R76	Res, 51K, 5%, 1/4W	17 AH 827
108	R72, R75	Res, 100K, 5%, 1/4W	17 AH 841
109	R25	Res, 200K, 5%, 1/4W	17 AH 855
110	R68	Res, 2.2M, 5%, 1/4W	17 AH 905
111	R2	Res, 3.9M, 5%, 1/4W	17 AH 917
112	R31	Res, 120 Ohm, 5%, 2W	17 AD 151
113	R6	Res, 1.00K, 1%, 1/8W	17 AF 192
114	R19	Res, 845 Ohm, 1%, 1/8W	17 AF 185
115	R29, R42, R43, R56, R57	Res, 2.00K, 1%, 1/8W	17 AF 221
116	R16	Res, 3.57K, 1%, 1/8W	17 AF 245
117	R55	Res, 4.02K, 1%, 1/8W	17 AF 250
118	R36, R51	Res, 4.12K, 1%, 1/8W	17 AF 251
119	R28, R66, R115	Res, 4.99K, 1%, 1/8W	17 AF 259
120	R14, R45	Res. 6.04K, 1%, 1/8W	17 AF 267
121	R34,	Res, 8.87K, 1%, 1/8W	17 AF 283
122	R17, R24, R30,R37, R38, R40, R97,R102, R105, R106, R109,R112	Res, 10.00K, 1%, 1/8W	17 AF 288

TABLE 6.10 PCB2, MODEL C68–2 SERIES 01 CONTROLLER TEMP. CONT. AND ALARM LOGIC, PARTS LIST

(Sheet 5 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
123	R47	Res, 10.20K, 1%, 1/8W	17 AF 289
124	R7, R59	Res, 14.00K, 1%, 1/8W	17 AF 302
125	R44, R77, R21	Res, 15.00K, 1%, 1/8W	17 AF 305
126	R8, R13, R22, R33, R62, R96, R74	Res, 20.00K, 1%, 1/8W	17 AF 317
127	R26	Res, 24.90K, 1%, 1/8W	17 AF 326
128	R39,	Res, 31.60K, 1%, 1/8W	17 AF 336
129	R20	Res, 13.7K, 1%, 1/8W	17 AF 301
130	R10	Res, 45.30K, 1%, 1/8W	17 AF 351
131	R18, R61, R5	Res, 49.90K, 1%, 1/8W	17 AF 355
132	R9	Res, 60.40K, 1%, 1/8W	17 AF 363
133	R41, R46, R110	Res, 100.00K, 1%, 1/8W	17 AF 384
134	R73	Res, 249.00K, 1%, 1/8W	17 AF 422
135	R60	Res,17.8K, 1%, 1/8W	17 AF 312
136	R12, R108, R114	Res, 1.00M, 1%, 1/8W	17 AF 480
137	R103	Res, 1.18M, 1%, 1/8W	17 AF 487
138	R63	Res, Ntwk, 10K, 2%, 1.75W, 16 DIP	17 AU 530
139	S1	Switch, Rotary, 4 PDT	17 682 05
140		Not Used	
141	J13A, J13B	Contact, Male Pin, PC Mtg. .040 DiA	17 730 13
142	TP6, TP7 TP10, TP12 TP13, TP14 TP15, TP17 TP18, TP19 TP20, TP22 TP23, TP24 TP25, TP27 TP28, TP29 TP30, TP46	Socket Lead	17 731 09
143		Not Used	
144		Not Used	
145	Q1	Transistor, A8T404–A, PNP	17 627 86
146	Q2	Transistor, 2N4124, NPN	17 625 58
147	R53	Res, 10.7K, 1%, 1/8W, Film	17 AF 291
148	R49	Res, 34.8K, 1%, 1/8W, Film	17 AF 340
149	R52	Res, 35.7K, 1%, 1/8W, Film	17 AF 341
150	R54	Res, 69.8K, 1%, 1/8W, Film	17 AF 369
151	R50	Res, Var, 2K, .5W, Multi–turn, Vert. Adj	17 AN 427
152		Alarm Enable Plug Assy	68 351 40

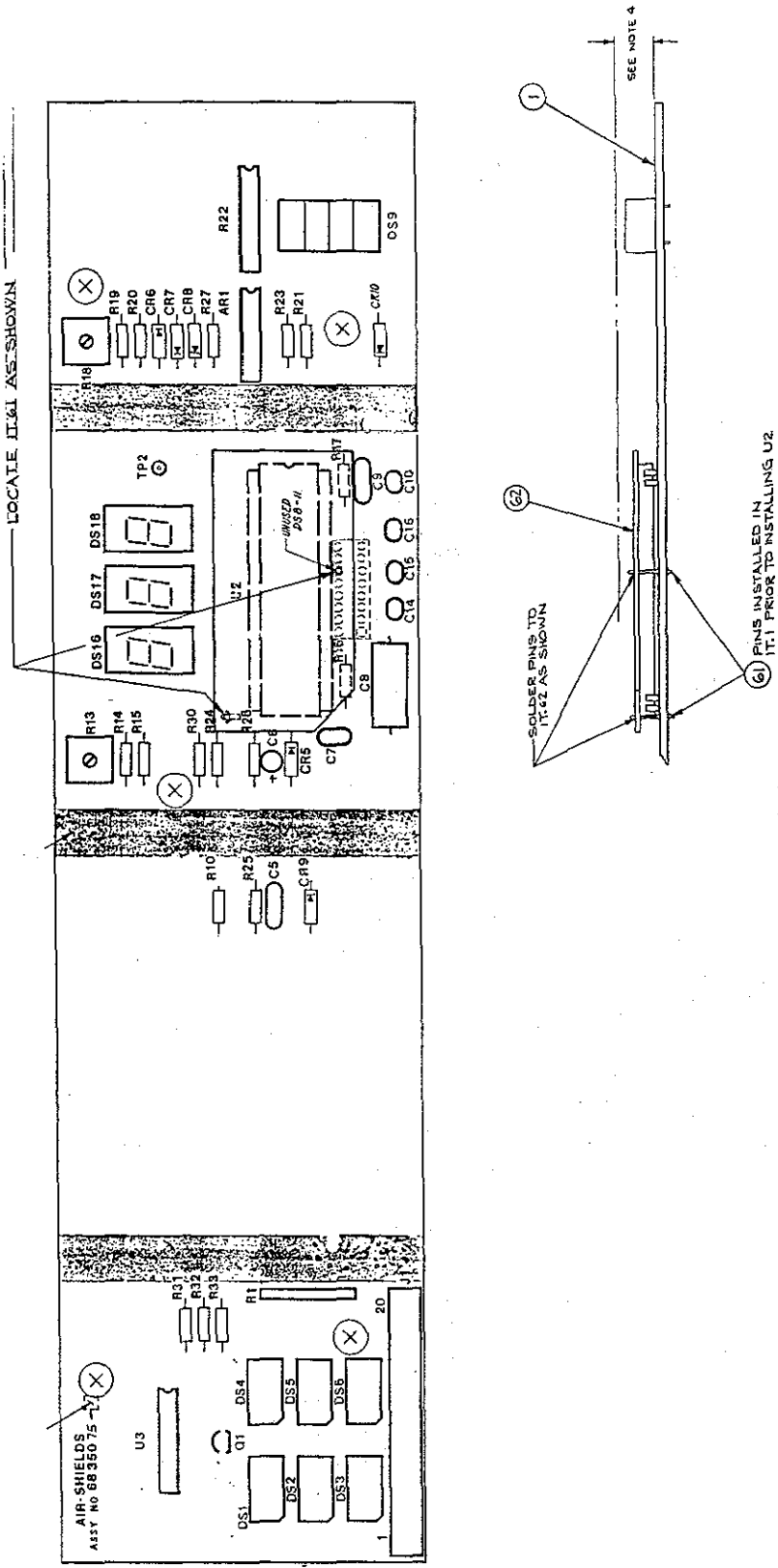
LOCATE IT-61 AS SHOWN
AIR SHIELDS
ASSY NO 88350 75
SEE NOTE 4
SOLDER PINS TO IT-62 AS SHOWN
PINS INSTALLED IN IT-1 PRIOR TO INSTALLING U2

FIGURE 6.11 PARTS LOCATION DIAGRAM, DISPLAY BOARD PCB1–MODEL C82–1 CONTROLLER

(Change 13)

TABLE 6.11 PCB1, MODEL C82–1 CONTROLLER DISPLAY BOARD, PARTS LIST

(Sheet 1 of 2)

PART NO. 68 350 75T

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		Not Used	
2		Not Used	
3		Not Used	
4		Not Used	
5		Not Used	
6		Not Used	
7		Not Used	
8		Not Used	
9		Not Used	
10		Not Used	
11		Support, PCB, INTL THD .50 LG.	17 AZ 534
12		Screw, 6–32 x 1/4 TR, PH, SS	99 022 72
13	J1	Conn. Recpt, PC Flat Cable, 20 Posn	17 BP 074
14		Not Used	
15		Not Used	
16*	C7	Cap, 0.047 MFD, 10%, 50V	17 BF 257
	C7	Cap, 0.01 MFD, +80%, –20%, 50V (Rev. 4 and below PCB Only)	17 BF 388
17	C14, C15, C16	Cap, .001 MFD, 10%, 50V	17 BF 377
18	C5	Cap, .10 MFD, 20%, 50V	17 430 57
19	C8	Cap, .22 MFD, 5%, 100V	17 AY 085
20*	C10	Cap, 100 PFD, 10%, 50V	17 BF 365
	C10	Cap, 0.001 MFD, 10%, 50V (Rev. 4 and below PCB Only)	17 BF 377
21	C6	Cap, 3.9 MFD, 10%, 15V	17 AW 223
22*	C9	Cap, 1.0 MFD, 20%, 50V	17 BF 224
23*	CR6	Diode, IN34A	17 500 20
	C9	Cap, 0.10 MFD, 20%, 50V (Rev. 3 and below PCB Only)	17 430 57
24		Diode, Schottky, 1N5711	17 502 71
25	CR5, CR7	Diode, 1N914	17 AR 500
26*	CR8, CR9	Diode, Zener, 1N752A, 5.6V	17 502 60
	CR9	Diode, Zener, IN4740A, 10V 5%, 1W (Rev. 4 and below PCB Only)	17 500 10
27	U3	Integ. Crkt. 4050	17 630 01
28	AR1	Integ. Crkt. LM324AN	17 631 45
29	U2	Integ. Crkt. 7107	17 630 75
30	DS16, DS17, DS18	Display, LED, Orange	17 BE 247

* See page 2 at front of this manual for information on Modification Kits.

(Change 16)

TABLE 6.11 PCB1, MODEL C82–1 CONTROLLER DISPLAY BOARD, PARTS LIST

(Sheet 2 of 2)

PART NO. 68 350 75T

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
31	DS1, DS2, DS3		
	DS5, DS6	Lamp, LED, Red	17 807 00
32	DS9	Lamp, LED, Yellow	17 BE 252
33		Not Used	
34		Not Used	
35	R13, R18	Res, Var, 500 ohms, .5W, Vrt Adj	17 AN 011
36		Not Used	
37		Not Used	
38	R1	Res Network, Sip, 470 ohms, 5%, 1/8W	17 AU 025
39	R22	Res Network, Dip, 390 ohms, 2%, 1.75W	17 AU 560
40		Not Used	
41	R10	Res, 51 ohms, 5%, 1/4W	17 AA 124
42	R30, R33	Res, 220 ohms, 5%, 1/4W	17 AA 169
43		Not Used	
44	R27	Res, 33K, 5%, 1/4W	17 AA 325
	R27	Res, 20K, 5%, 1/4W (Rev. 3 and below PCB Only)	17 500 10
45*	R24, R34	Res, 330 ohms, 5%, 1/4W	17 AH 721
	R24 (Rev. 4 and below PCB Only)	Res, 47 Ohms, 5%, 1/4W	17 AA 121
	R34	Not Used (Rev. 4 and below PCB Only)	
46	R32	Res, 5.1K, 5%, 1/4W	17 AA 268
47		Not Used	
48	R23	Res, 182 ohms, 1%, 1/8W	17 AF 121
49	R14	Res, 1.50K, 1%, 1/8W	17 AF 209
50	R19	Res, 2.00K, 1%, 1/8W	17 AF 221
51	R21	Res, 3.09K, 1%, 1/8W	17 AF 239
52	R26	Res, 10.00K, 1%, 1/8W	17 AF 288
53	R25, R31	Res, 15.00K, 1%, 1/8W	17 AF 305
54	R15, R20	Res, 20.00K, 1%, 1/8W	17 AF 317
55*	R17	Res, 100K, 1%, 1/8W	17 AF 384
	R17	Res, 36.5K, 1%, 1/8W (Rev. 4 and below PCB Only)	17 AF 342
56*	R16	Res, 475K, 1%, 1/8W	17 AF 449
	R16	Res, 2.21M, 1%, 1/8W (Rev. 4 and below PCB Only)	17 AF 513
57		Not Used	
58		Not Used	
59	Q1	Transistor, 2N4124	17 625 58
60		Cable, Flat, Flex Crkt, 20 Posn	68 951 72

* See page 2 at front of this manual for information on Modification Kits.

(Change 16)

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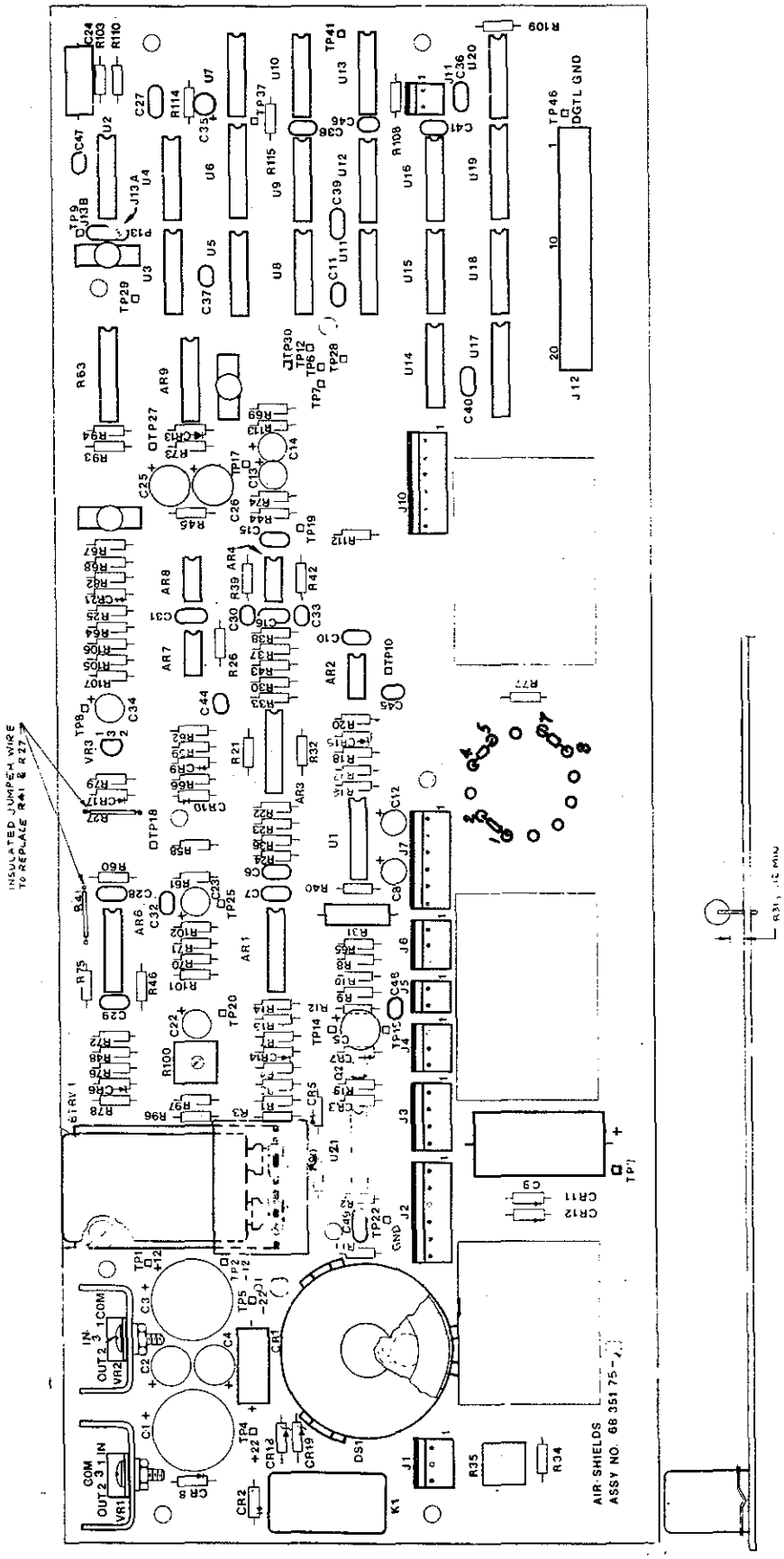

FIGURE 6.12 PARTS LOCATION DIAGRAM, TEMPERATURE CONTROL AND ALARM LOGIC, PCB2, C82–1 SERIES 00

TABLE 6.12 PCB2 – MODEL C82–1 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 1 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		This PCB Assembly is no longer available,order Retrofit Kit	68 905 75
2		Not Used	
3		Not Used	
4		Not Used	
5		Not Used	
6		Not Used	
7		Not Used	
8		Not Used	
9		Not Used	
10		Not Used	
11		Heat Sink	17 061 14
12		Insulator, Transistor, Thrm Cndct	17 061 19
13		Holder, Btry, PCB Mtg	17 806 99
14		Battery, 7.2V, Rechargeable	17 807 65
15		Not Used	
16		Transducer,Tone, Replacement Kit	68 903 89
17		Not Used	
18		Screw, 4–40 x 3/8 TR, PH, SS	99 011 07
19		NT. 4–40 HX, KEPS, S, CAD	99 103 33
20		Wshr, No. 4 FL, NY	99 121 23
21		Scr, 4–40 x l/4 TR, PH, SS	99 010 56
22		Nut, 4–40 HX, SS	99 103 35
23		Not Used	
24	C30, C33 C44, C45, C47, C49	Cap, 0.001 Mfd, 10%, 50V	17 BF 377
25	C6, C7, C10, C15, C16, C27 C28, C29, C31 C36, C38, C39 C40, C41	Cap, 0.01 Mfd +80% –20%, 50V	17 BF 388
26	C11, C32, C37, C46, C48	Cap, 0.10 Mfd, 20%, 50V	17 BF 217
27	C35	Cap, 0.33 Mfd, 10%, 50V	17 AW 206
28	C24	Cap, 0.56 Mfd, 5%, 100V	17 AY 100
29	C8, C12, C13, C14, C22, C23, C24	Cap, 4.7 Mfd, 10%, 35V	17 AW 224
30	C2, C4, C5, C25, C26	Cap, 56 Mfd, 10%, 15V	17 AW 257

TABLE 6.12 PCB2 – MODEL C82–1 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 2 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
31	C1	Cap, 1000 Mfd, +50% –10%, 35V	17 AW 853
32	C9	Cap, 1000 Mfd +50% –10%, 16V	17 405 34
33	C3	Cap, 470 Mfd, +50% –10%, 35V	17 AW 833
34		Not Used	
35		Not Used	
36		Not Used	
37		Not Used	
38		Not Used	
39		Not Used	
40		Not Used	
41	J5, J11	Conn, Rcpt, Male, 2 posn.	17 BP 025
42	J1, J4, J6	Conn, Rcpt, Male, 3 posn.	17 BP 026
43	J3	Conn, Rcpt, Male, 4 posn.	17 BP 027
44		Not Used	
45	J2, J7	Conn, Rcpt, Male, 6 posn.	17 BP 029
46	J12	Conn, Rcpt, Female, 20 posn.	17 BP 074
47		Not Used	
48		Not Used	
49		Not Used	
50		Not Used	
51	CR3, CR5, CR7, CR8, CR9, CR10, CR13, CR21	Diode, 1N914	17 AR 500
52	CR14	Diode, Zener, 1N4744A, 15V	17 502 38
53	CR2, CR11, CR12	Diode, 1N4001	17 AS 000
54	CR15	Diode, Zener, 1N4736A, 6.8V	17 501 68
55		Not Used	
56	CR6, CR17	Diode, Zener, 1N5231B, 5.1V	17 502 08
57	CR18, CR19	Diode, Zener, 1N4742A, 12.0V	17 502 21
58		Not Used	
59		Not Used	
60		Not Used	
61	U2, U7, U15	I.C. 4001	17 629 75
62	U9, U11, U13, U18	I.C. 4011	17 629 77
63	U4, U5, U8, U10, U12	I.C. 4013	17 629 57
64	U14	I.C. 4023	17 629 83
65	U3	I.C. 4024	17 629 84
66	U20	I.C. 4025	17 629 85

TABLE 6.12 PCB2 – MODEL C82–1 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 3 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
67	U17, U19	I.C.4027	17 629 86
68	U6	I.C. 4520	17 631 34
69	U16, U21	I.C. 4069	17 629 92
70	U1	I.C. 4066	17 630 76
71	AR2, AR7	I.C. 1458	17 629 36
72	AR1, AR3, AR9	I.C. 3302	17 629 58
73	AR6	I.C. 3403	17 629 70
74	AR8	I.C. TL081CP	17 630 77
75	AR4	I.C. 358A	17 631 85
76		Not Used	
77		Not Used	
78		Not Used	
79		Jumper,Resistor Body	17 217 62
80		Not Used	
81	R35	Res, Var, 500 ohms, .5W, Vrt Adj	17 AN 186
82	R100	Res, Var, 20K, .5W, Vrt Adj	17 AN 021
83		Not Used	
84		Not Used	
85		Not Used	
86		Not Used	
87		Not Used	
88	P13	Conn, Jumper Plug, Female	17 730 12
89		Not Used	
90		Not Used	
91	CR1	Rectifier, Bridge, 1.5A	17 AS 201
92		Not Used	
93		Not Used	
94	VR1	Rgltr, V, 78M12UC (+12V)	17 AT 003
95	VR2	Rgltr, V, 79M12AUC (–12V)	17 AT 013
96	VR3	Rgltr, V, 78L05AWC (+5V)	17 AT 041
97		Not Used	
98		Not Used	
99	K1	Relay, SPDT, 12V, 10A	17 652 66
100	R64	Res, 100 Ohm, 5%, 1/4W	17 AH 697
101	R11	Res, 160K, 5%, 1/4W	17 AH 851
102	R23, R65	Res, 5.1K, 5%, 1/4W	17 AH 779
103	R1, R32, R48 R58, R67, R69, R70, R78, R80, R82, R93, R94, R101, R107, R113	Res, 10K, 5%, 1/4W	17 AH 793

(Change 13)

TABLE 6.12 PCB2 – MODEL C82–1 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 4 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
104	R3	Res, 12K, 5%, 1/4W	17 AA 295
106		Not Used	
107	R71, R76	Res, 51K, 5%, 1/4W	17 AA 340
108	R72, R75	Res, 100K, 5%, 1/4W	17 AA 361
109	R25	Res, 200K, 5%, 1/4W	17 AA 382
110	R68	Res, 2.2M, 5%, 1/4W	17 AA 457
111	R2	Res, 3.9M, 5%, 1/4W	17 AA 475
112	R31	Res, 120 Ohm, 5%, 2W	17 AD 151
113		Not Used	
114	R19	Res, 845 Ohm, 1%, 1/8W	17 AF 185
115	R42, R43	Res, 2.00K, 1%, 1/8W	17 AF 22
116	R16	Res, 3.57K, 1%, 1/8W	17 AF 245
117		Not Used	
118	R36	Res, 4.12K, 1%, 1/8W	17 AF 251
119	R4, R66, R115	Res, 4.99K, 5%, 1/4W	17 AF 259
120	R14, R45	Res, 6.04K, 1%, 1/8W	17 AF 267
121	R34, R49	Res, 8.87K, 1%, 1/8W	17 AF 283
122	R17, R24, R30 R37, R38, R40 R97, R102, R105, R106, R109, R112	Res, 10.00K, 1%, 1/8W	17 AF 288
123		Not Used	
124	R7, R20*, R59	Res, 14.00K, 1%, 1/8W	17 AF 302
125	R21, R44, R77	Res, 15.00K, 1%, 1/8W	17 AF 305
126	R8, R13, R22, R33, R60*, R62, R74, R96	Res, 20.00K, 1%, 1/8W	17 AF 317
127	R26	Res, 24.90K, 1%, 1/8W	17 AF 326
128	R39	Res, 31.60K, 1%, 1/8W	17 AF 336
129**	R20	Res, 13.7K, 1%, 1/8W	17 AF 301
130	R10	Res, 45.30K, 1%, 1/8W	17 AF 351
131	R5, R18, R61	Res, 49.90K, 1%, 1/8W	17 AF 355
132	R9	Res, 60.40K, 1%, 1/8W	17 AF 363
133	R46, R110	Res, 100.00K, 1%, 1/8W	17 AF 384
134	R73	Res, 249.00K, 1%, 1/8W	17 AF 422
135**	R60	Res,17.8K, 1%, 1/8W	17 AF 312
136	R12, R108, R114	Res, 1.00M, 1%, 1/8W	17 AF 480

TABLE 6.12 PCB2 – MODEL C82–1 SERIES 00 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 5 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
137	R103	Res, 1.18M, 1%, 1/8W	17 AF 487
138	R63	Res, Ntwk, 10K, 2%, 1.75W, 16 DIP	17 AU 530
139*	R20	Res, 13.7K, 1%, 1/8W	17 AF 301
140*	R60	Res,17.8K, 1%, 1/8W	17 AF 312
141	J13A, J13B	Contact, Male Pin, PC Mtg, .040 Dia	17 730 13
142	TP6, TP7, TP10 TP12, TP14, TP15, TP17, TP18, TP19, TP20, TP22, TP25, TP27, TP28, TP29, TP30, TP46	Socket, Lead	17 731 09
143		Not Used	
144		Not Used	
145	Q1	Transistor, A8T404A (PNP)	17 627 86
146	Q2	Transistor, 2N4124 (NPN)	17 625 58

*PCB2 Rev. 3 and below unless Retrofit Kit P/N 68 902 70 has been installed. If kit has been installed, see items 129 (R20) and 135 (R60) for value and P/N of resistors. See also page 2 at front of this manual.

**PCB2 Rev. 4 and above.

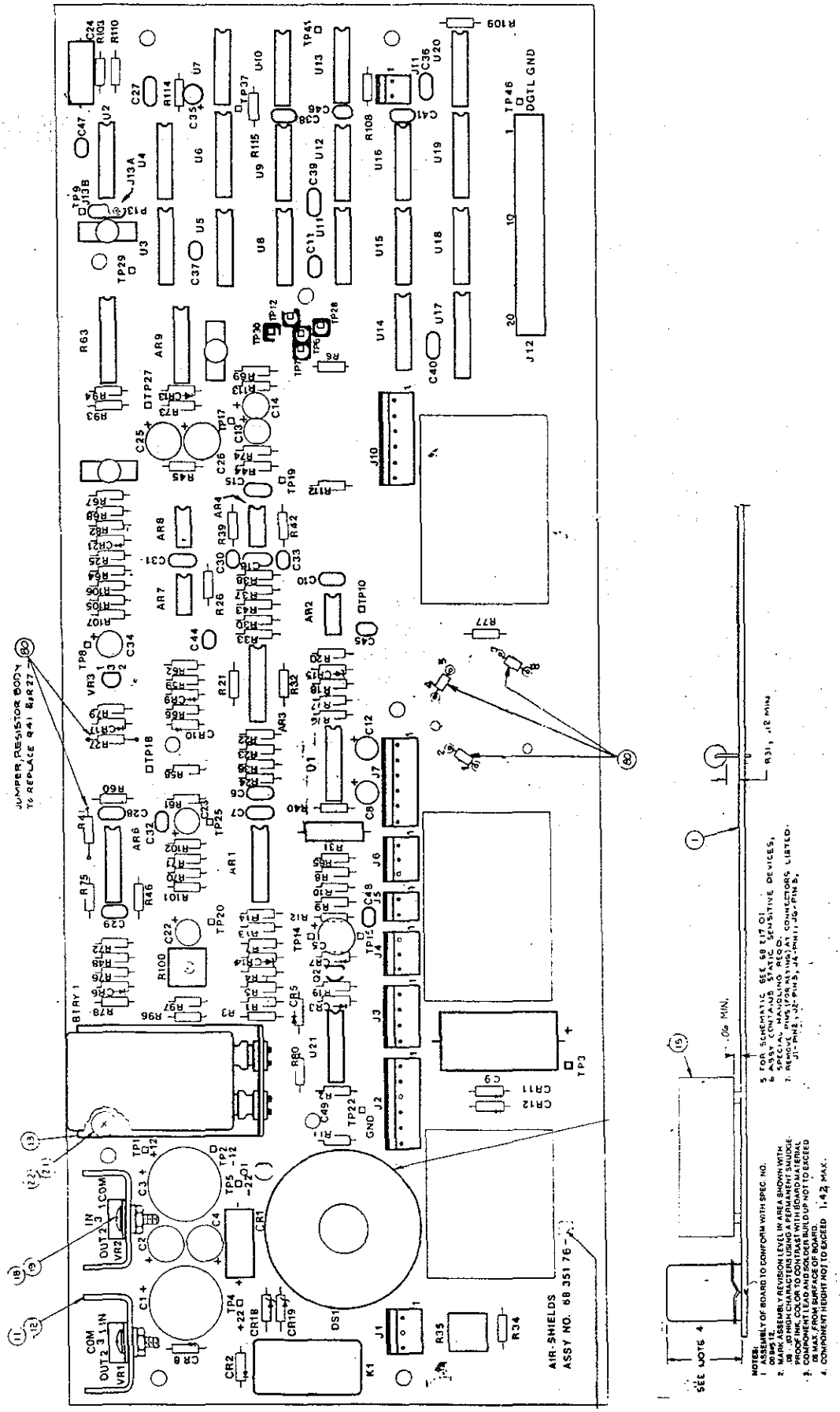

FIGURE 6.13 PARTS LOCATION DIAGRAM, TEMPERATURE CONTROL AND ALARM LOGIC PCB2 MODEL C82–1 SERIES 01 CONTROLLER

TABLE 6.13 PCB2 MODEL C82–1 SERIES 01 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 1 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		PCB Assembly	68 905 75
2		Not Used	
3		Not Used	
4		Not Used	
5		Not Used	
6		Not Used	
7		Not Used	
8		Not Used	
9		Not Used	
10		Not Used	
11		Heat Sink	17 061 14
12		Insulator, Transistor, Thrm Cndct	17 061 19
13		Holder, Btry, PCB Mtg	17 806 99
14		Battery, 7.2V, Rechargeable	17 807 65
15		Not Used	
16		Transducer,Tone, Replacement Kit	68 903 89
17		Not Used	
18		Screw, 4–40 x 3/8 TR, PH, SS	99 011 07
19		NT. 4–40 HX, KEPS, S, CAD	99 103 33
20		Wshr, No. 4 FL, NY	99 121 23
21		Scr, 4–40 x l/4 TR, PH, SS	99 010 56
22		Nut, 4–40 HX, SS	99 103 35
23		Not Used	
24	C30, C33 C44, C45, C47, C49	Cap, 0.001 Mfd, 10%, 50V	17 BF 377
25	C6, C7, C10, C15, C16, C27 C28, C29, C31 C36, C38, C39 C40, C41	Cap, 0.01 Mfd +80% –20%, 50V	17 BF 388
26	C11, C32, C37, C46, C48	Cap, 0.10 Mfd, 20%, 50V	17 BF 217
27	C35	Cap, 0.33 Mfd, 10%, 50V	17 AW 206
28	C24	Cap, 0.56 Mfd, 5%, 100V	17 AY 100
29	C8, C12, C13, C14, C22, C23, C24	Cap, 4.7 Mfd, 10%, 35V	17 AW 224
30	C2, C4, C5, C25, C26	Cap, 56 Mfd, 10%, 15V	17 AW 257

(Change 16)

TABLE 6.13 PCB2 MODEL C82–1 SERIES 01 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 2 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
31	C1	Cap, 1000 Mfd, +50% –10%, 35V	17 AW 853
32	C9	Cap, 1000 Mfd +50% –10%, 16V	17 405 34
33	C3	Cap, 470 Mfd, +50% –10%, 35V	17 AW 833
34	C2,C4	Cap, 56 uF, 10%, 25V	17 AW 256
35		Not Used	
36		Not Used	
37		Not Used	
38		Not Used	
39		Not Used	
40		Not Used	
41	J5, J11	Conn, Rcpt, Male, 2 posn.	17 BP 025
42	J1, J4, J6	Conn, Rcpt, Male, 3 posn.	17 BP 026
43	J3	Conn, Rcpt, Male, 4 posn.	17 BP 027
44		Not Used	
45	J2, J7,J10	Conn, Rcpt, Male, 6 posn.	17 BP 029
46	J12	Conn, Rcpt, Female, 20 posn.	17 BP 074
47		Not Used	
48		Not Used	
49		Not Used	
50		Not Used	
51	CR3, CR5, CR7, CR8, CR9, CR10, CR13, CR21	Diode, 1N914	17 AR 500
52	CR14	Diode, Zener, 1N4744A, 15V	17 502 38
53	CR2, CR11, CR12	Diode, 1N4001	17 AS 000
54	CR15	Diode, Zener, 1N4736A, 6.8V	17 501 68
55		Not Used	
56	CR6, CR17	Diode, Zener, 1N5231B, 5.1V	17 502 08
57	CR18, CR19	Diode, Zener, 1N4742A, 12.0V	17 502 21
58		Not Used	
59		Not Used	
60		Not Used	
61	U2, U7, U15	I.C. 4001	17 629 75
62	U9, U11, U13,U18	I.C. 4011	17 629 77
63	U4, U5, U8, U10, U12	I.C. 4013	17 629 57
64	U14	I.C. 4023	17 629 83
65	U3	I.C. 4024	17 629 84
66	U20	I.C. 4025	17 629 85

TABLE 6.13 PCB2 MODEL C82-1 SERIES 01 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 3 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
67	U17, U19	I.C.4027	17 629 86
68	U6	I.C. 4520	17 631 34
69	U16, U21	I.C. 4069	17 629 92
70	U1	I.C. 4066	17 630 76
71	AR2, AR7	I.C. 1458	17 629 36
72	AR1, AR3, AR9	I.C. 3302	17 629 58
73	AR6	I.C. 3403	17 629 70
74	AR8	I.C. TL081CP	17 630 77
75	AR4	I.C. 358A	17 631 85
76		Not Used	
77		Not Used	
78		Not Used	
79		Jumper Resistor Body	17 217 62
80		Not Used	
81	R35	Res, Var, 500 ohms, .5W, Vrt Adj	17 AN 186
82	R100	Res, Var, 20K, .5W, Vrt Adj	17 AN 021
83		Not Used	
84		Not Used	
85		Not Used	
86		Not Used	
87		Not Used	
88	P13	Conn, Jumper Plug, Female	17 730 12
89		Not Used	
90		Not Used	
91	CR1	Rectifier, Bridge, 1.5A	17 AS 201
92		Not Used	
93		Not Used	
94	VR1	Rgltr, V, 78M12UC (+12V)	17 AT 003
95	VR2	Rgltr, V, 79M12AUC (–12V)	17 AT 013
96	VR3	Rgltr, V, 78L05AWC (+5V)	17 AT 041
97		Not Used	
98		Not Used	
99	K1	Relay, SPDT, 12V, 10A	17 652 66
100	R64	Res, 100 Ohm, 5%, 1/4W	17 AH 697
101	R11	Res, 160K, 5%, 1/4W	17 AH 851
102	R23, R65	Res, 5.1K, 5%, 1/4W	17 AH 779
103	R1, R32, R48 R58, R67,R69, R70, R78, R80, R82, R93, R94, R101,R107, R113	Res, 10K, 5%, 1/4W	17 AH 793

(Change 13)

TABLE 6.13 PCB2 MODEL C82–1 SERIES 01 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 4 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
104	R3	Res, 12K, 5%, 1/4W	17 AH 797
105	R79	Res, 20K, 5%, 1/4W	17 AH 807
106		Not Used	
107	R71, R76	Res, 51K, 5%, 1/4W	17 AH 827
108	R72, R75	Res, 100K, 5%, 1/4W	17 AH 841
109	R25	Res, 200K, 5%, 1/4W	17 AH 855
110	R68	Res, 2.2M, 5%, 1/4W	17 AH 905
111	R2	Res, 3.9M, 5%, 1/4W	17 AH 917
112	R31	Res, 120 Ohm, 5%, 2W	17 AD 151
113	R6	Res, 1.00K, 1%, 1/4W	17 AF 192
114	R19	Res, 845 Ohm, 1%, 1/8W	17 AF 185
115	R42, R43	Res, 2.00K, 1%, 1/8W	17 AF 221
116	R16	Res, 3.57K, 1%, 1/8W	17 AF 245
117		Not Used	
118	R36	Res, 4.12K, 1%, 1/8W	17 AF 251
119	R4, R66, R115	Res, 4.99K, 5%, 1/4W	17 AF 259
120	R14, R45	Res, 6.04K, 1%, 1/8W	17 AF 267
121	R34,	Res, 8.87K, 1%, 1/8W	17 AF 283
122	R17, R24, R30 R37, R38, R40 R97, R102, R105, R106, R109, R112	Res, 10.00K, 1%, 1/8W	17 AF 288
123		Not Used	
124	R7, R59	Res, 14.00K, 1%, 1/8W	17 AF 302
125	R21, R44, R77	Res, 15.00K, 1%, 1/8W	17 AF 305
126	R8, R13, R22, R33, R62, R74, R96	Res, 20.00K, 1%, 1/8W	17 AF 317
127	R26	Res, 24.90K, 1%, 1/8W	17 AF 326
128	R39	Res, 31.60K, 1%, 1/8W	17 AF 336
129	R20	Res, 13.7K, 1%, 1/8W	17 AF 301
130	R10	Res, 45.30K, 1%, 1/8W	17 AF 351
131	R5, R18, R61	Res, 49.90K, 1%, 1/8W	17 AF 355
132	R9	Res, 60.40K, 1%, 1/8W	17 AF 363
133	R46, R110	Res, 100.00K, 1%, 1/8W	17 AF 384
134	R73	Res, 249.00K, 1%, 1/8W	17 AF 422
135	R60	Res,17.8K, 1%, 1/8W	17 AF 312
136	R12, R108, R114	Res, 1.00M, 1%, 1/8W	17 AF 480

TABLE 6.13 PCB2 MODEL C82–1 SERIES 01 CONTROLLER TEMPERATURE CONTROL AND ALARM LOGIC, PARTS LIST

(Sheet 5 of 5)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
137	R103	Res, 1.18M, 1%, 1/8W	17 AF 487
138	R63	Res, Ntwk, 10K, 2%, 1.75W, 16 DIP	17 AU 530
139		Not Used	
140	R60	Res,17.8K, 1%, 1/8W	17 AF 312
141	J13A, J13B	Contact, Male Pin, PC Mtg, .040 Dia	17 730 13
142	TP6, TP7, TP10 TP12, TP14, TP15, TP17, TP18, TP19, TP20, TP22, TP25, TP27, TP28, TP29, TP30, TP46	Socket, Lead	17 731 09
143		Not Used	
144		Not Used	
145	Q1	Transistor, A8T404A (PNP)	17 627 86
146	Q2	Transistor, 2N4124 (NPN)	17 625 58
147		Alarm Enable Plug Assy	68 351 40

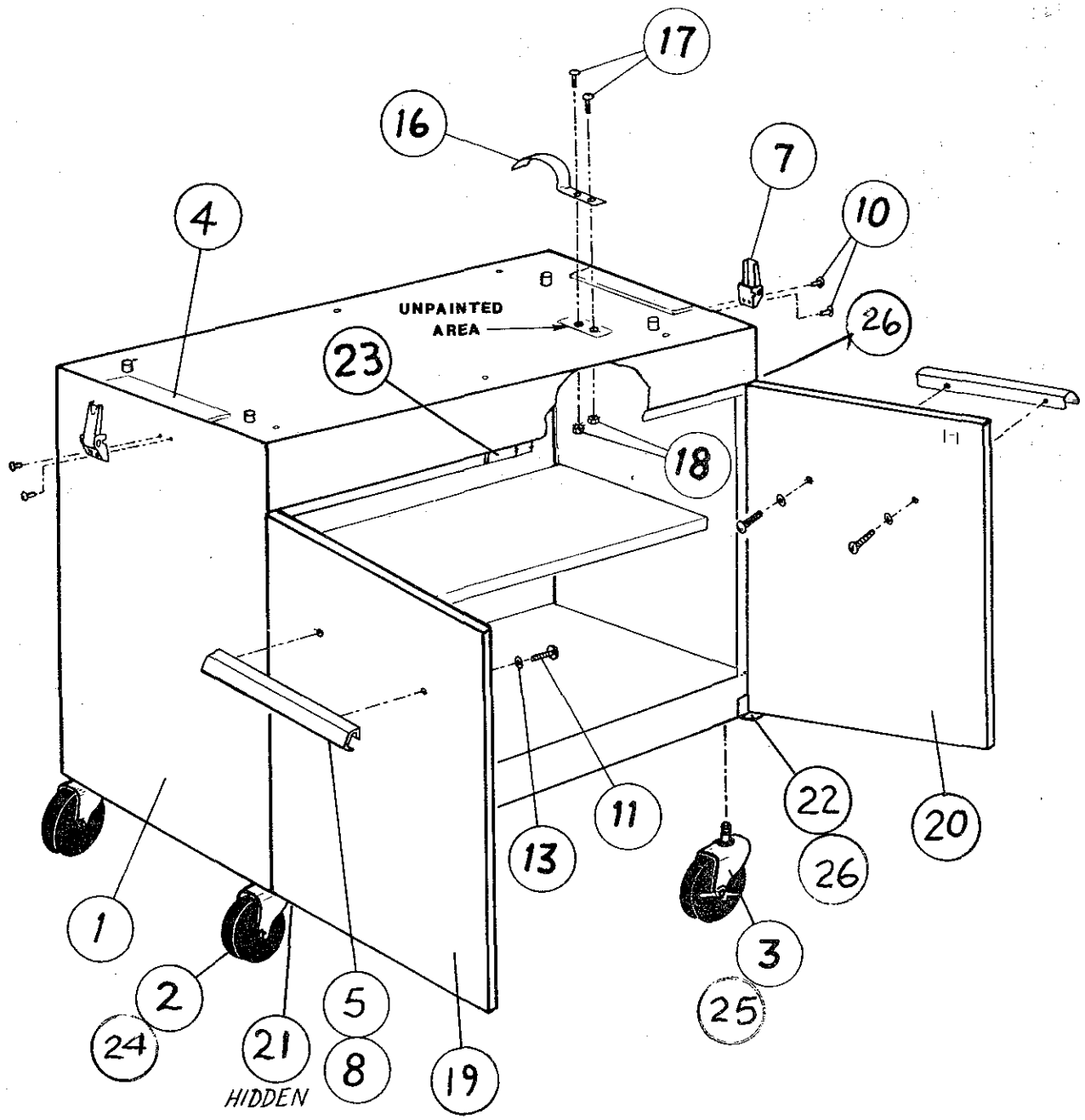

FIGURE 6.14 PARTS LOCATION DIAGRAM, CABINET STAND ASSEMBLY

TABLE 6.14 CABINET STAND ASSEMBLY

PART NO. 68 400 70

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER	
1		Cabinet Stand Assy	68 400 70	
2		Caster Without Brake, 4"	68 901 72	
3		Caster With Brake, 4"	68 901 71	
4		Sponge Strip, Neo.	26 800 33	
5		Handle	68 400 08	
6		Not Used		
7		Latch, Cabinet	24 717 00	
8		Tape Met. Polyest, Blue	26 801 23	
9		Not Used		
10		Scr, 6 x 1/4 B. Rd. SL SS	99 084 47	
11		Scr, 8–32 x 1 TR PH SS	99 033 47	
12		Not Used		
13		Wash. No. 8, LK SP S CAD	99 122 90	
14		Not Used		
15		Not Used		
16		Spring, Grounding	68 400 27	
17		Scr, 6–32 x 5/16 TR PH SS	99 022 98	
18		Nut, 6–32 HX "KEPS" S CAD	99 105 34	
19		Door, L.H.	68 400 21	1001374
20		Door, R.H.	68 400 20	1001375
21		Hinge, Door, L.H.	68 400 23	4110011
22		Hinge, Door, R.H.	68 400 22	4110010
23		Magnetic Catch	68 901 13	
24		Caster Without Brake, 5"	68 400 56	
25		Caster With Brake, 5"	68 400 55	
26		Bearing, FLG, Nyliner, .251 ID	68 404 49	■

(Change 16)

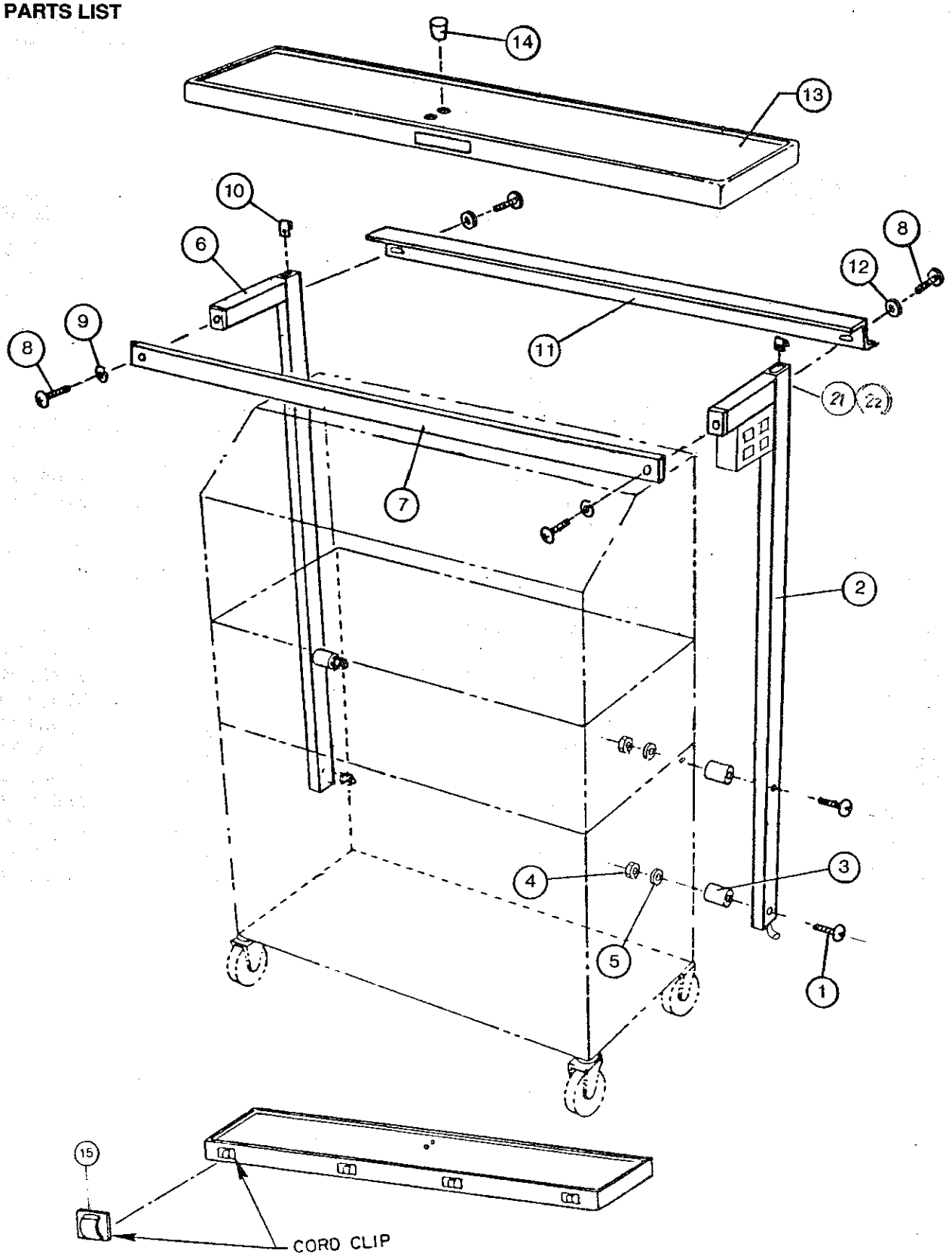

FIGURE 6.15 PARTS LOCATION DIAGRAM, ACCESSORY SHELF ASSEMBLY (ACCESSORY)

(Change 13)

TABLE 6.15 ACCESSORY SHELF ASSEMBLY, PARTS LIST (ACCESSORY)

PART NO. 26 610 80 (110/120V, With Lamp Assembly)
PART NO. 26 610 81 (110/120V, Without Lamp Assembly)
PART NO. 26 610 82 (220V, Without Lamp Assembly)
PART NO. 26 610 83 (220V, With Lamp Assembly)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		Scr, 1/4–20x3 RD SL SS	99 060 70
2		Support, RH Vert Assembly	
		110/120V Assembly	26 611 70
		220V Assembly	26 611 80
3		Spacer, Vert Support	26 610 20
4		Nut, 1/4–20 Hx KEPS S CA	99 109 41
5		Wshr, 1/4–20x3/4 OD FL S NI	99 125 22
6		Support, LH Vert Assembly	26 610 09
7		Support, Horiz, Front	26 610 54
8		Scr, 10–32x5/8 TR PH SS	99 042 58
9		Wshr, No. 10 LK SHI SS	99 123 92
10		Nut, No. 10 TINN "U"	99 107 57
11		Support, Horiz, Back	26 610 57
12		Wshr, No. 10 FL SS	99 123 62
13		Shelf, Overhead	26 610 01
14		Weigh Hook/Stopper Assembly	26 610 76
15		Clip, Cord	17 725 44
16*		Case, Lamp Assembly (110/120V)	26 610 88
17*		Case, Lamp Assembly (220V)	26 610 90
18*		Transformer, Ballast (60Hz, 120V) (P/O item 16)	17 604 23
		Transformer, Ballast (50Hz, 220V) (P/O item 17)	17 604 42
19*		Receptacle, Connector (P/O items 16 and 17)	17 723 51
20*		Lamp, Fluor, 20W (P/O items 16 and17)	17 806 94
21		Cable Clamp 0.31 ID	17 732 42
22		Screw, 8 x 32 x 3/8	99 088 60

* Not Shown. Used only on assemblies Part No. 26 610 80 and 26 610 83.

(Change 13)

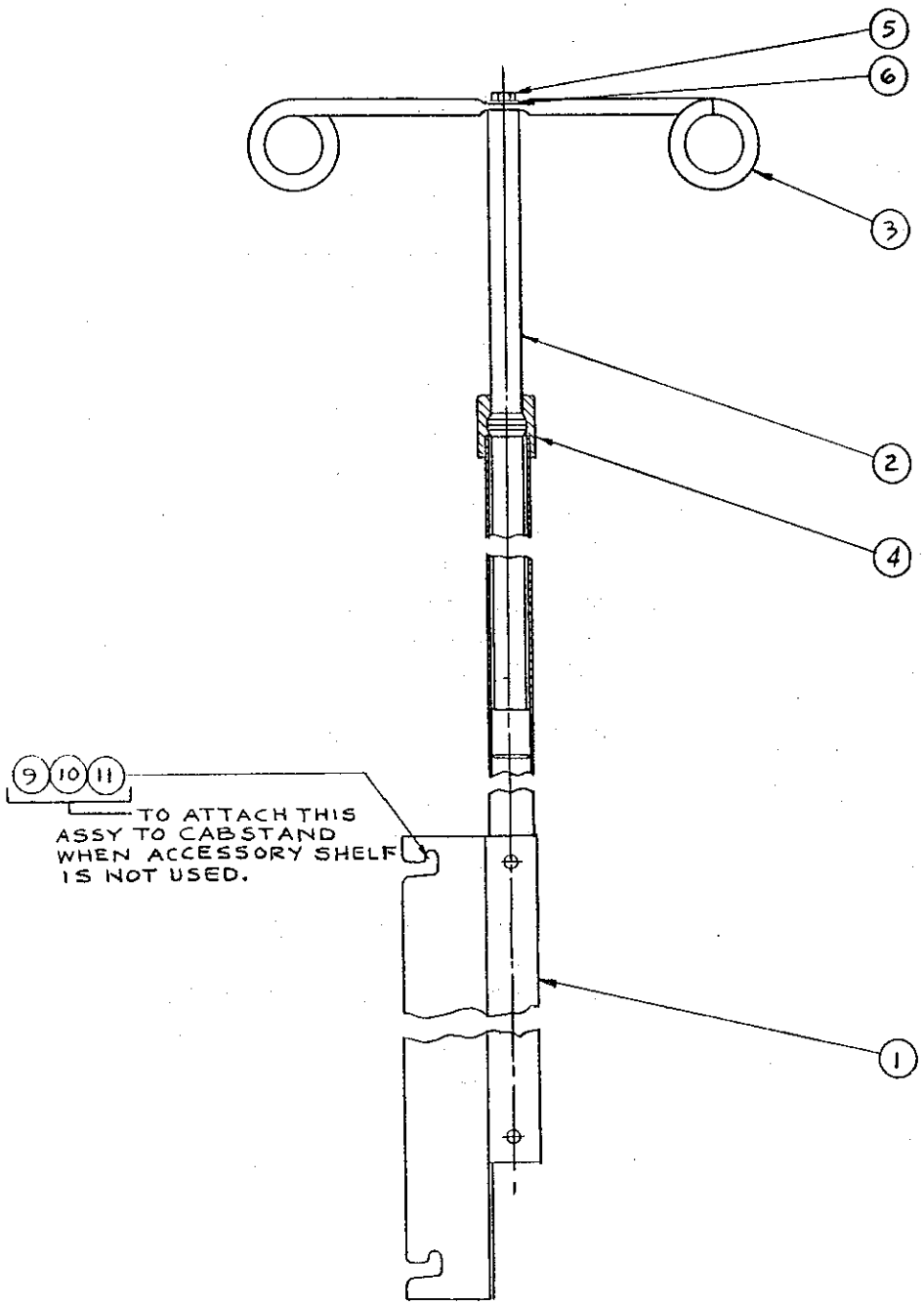

FIGURE 6.16 PARTS LOCATION DIAGRAM, I.V. POLE ASSEMBLY (ACCESSORY)

TABLE 6.16 I.V. POLE ASSEMBLY, PARTS LIST (ACCESSORY)

PART NO. 68 452 70

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		I.V. Pole	68 452 00
2		Upper Extension Assembly	26 825 70
3		Cross Arm	26 822 00
4		Locking Nut	26 821 00
5		Scr, 5/16–18x1/2HX S CA	99 064 21
6		Wshr, 5/16 LK SP S CA	99 126 32
7		Not Used	
8		Not Used	
9		Scr, 1/4–20x1/2 RD PH SS	99 055 81
10		Nut, 1/4–20Hx KEPS S CA	99 109 41
11		Wshr, 1/4x3/4 OD FL S NI	99 125 22

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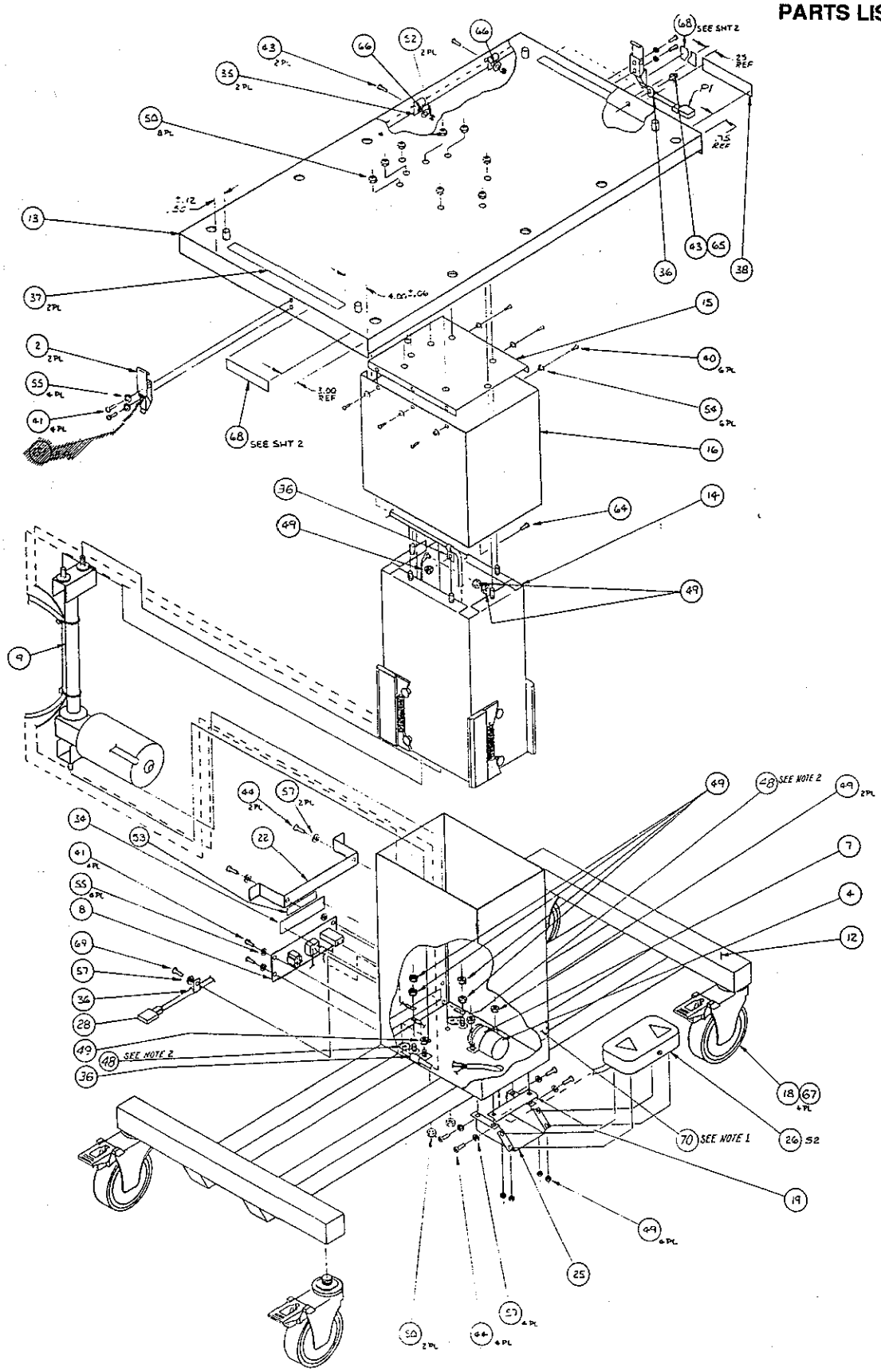


FIGURE 6.17 PARTS LOCATION DIAGRAM, VHA STAND (Sheet 1 of 2)
(Change 13)

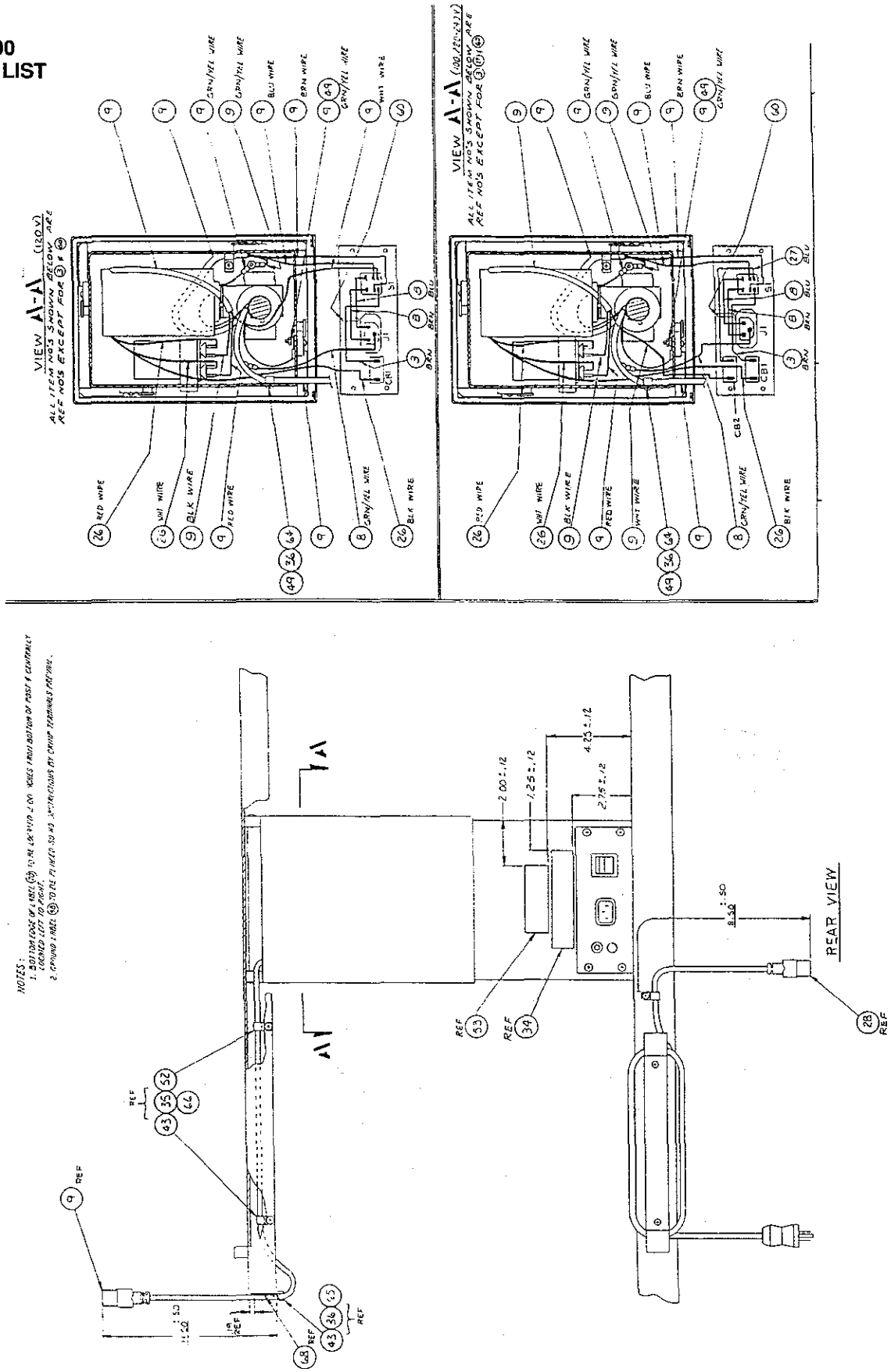


FIGURE 6.17 PARTS LOCATION DIAGRAM, VHA STAND (Sheet 2 of 2)

(Change 13)

TABLE 6.17 VHA STAND, PARTS LIST

(Sheet 1 of 3)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1		VHA STAND120V ENG	68 405 70
		VHA STAND120V SPN	68 405 71
		VHA STAND120V FRN	68 405 72
		VHA STAND 220/240V ENG	68 405 80
		VHA STAND 220/240V SPN	68 405 81
		VHA STAND 220/240V FRN	68 405 82
		VHA STAND 220/240V GER	68 405 83
		VHA STAND 100V JAPAN	68 405 90
2		DRAW LATCH, MODIFIED	68 404 23
3		JUMPER BRKR SW	68 405 39
4		CAP, 30 MFD, 240V 60HZ, MET PLYPR	17 405 81
		CAP, 10 MFD, 370V 60HZ, MET PLYPR	17 405 82
5		NOT USED	
6		NOT USED	
7		CAPACITOR CLAMP, 120V UNITS	68 404 24
		CAPACITOR CLAMP, 220/240V UNITS	68 404 25
8		POWER INLET PLATE ASSY, 117V ENG	68 404 90
		POWER INLET PLATE ASSY, 117V SPN	68 404 71
		POWER INLET PLATE ASSY, 117V FRN	68 404 72
		POWER INLET PLATE ASSY, 230V ENG	68 404 80
		POWER INLET PLATE ASSY, 230V SPN	68 404 81
		POWER INLET PLATE ASSY, 230V FRN	68 404 82
		POWER INLET PLATE ASSY, 230V GER	68 404 83
9		ACTUATOR ASSY 120V 50/60HZ	68 405 14
		ACTUATOR ASSY 220/240V 50/60HZ	68 405 33
10		NOT USED	
11		NOT USED	
12		BASE WELDMENT	68 405 07
13		PLATFORM	68 405 09
14		COLUMN, INNER ASSY	68 404 40
15		PLATE, TOP	68 405 13
16		ESCUTCHEON	68 405 15
17		NOT USED	
18		CASTER, 5.00 FULL LOCK	68 416 16
19		COVER PLATE, FOOT SWITCH	68 405 41
20		NOT USED	
21		NOT USED	
22		CLEAT, POWER CORD	68 110 53
23		NOT USED	
24		NOT USED	
25		BRACKET, FOOT SWITCH	68 405 40
26		FOOT SWITCH ASSY	68 405 47
		FOOT SWITCH ASSY INTERNATIONAL	68 412 47
27		JUMPER, BRKR–SW	68 405 30
28		CABLE ASSY, AC POWER 120V	17 AZ 100
		CABLE ASSY, AC POWER 220/240V	17 AZ 200

(Change 16)

TABLE 6.17 VHA STAND, PARTS LIST

(Sheet 2 of 3)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
29		NOT USED	
30		NOT USED	
31		NOT USED	
32		NOT USED	
33		NOT USED	
34		NOT USED	
35		CLAMP, CORD	17 061 25
36		CLAMP, CORD	17 734 01
37		SPONGE STRIP, NEO	26 800 33
38		LABEL, POWER CORD ENG	68 404 29
		LABEL, POWER CORD SPN	68 404 30
		LABEL, POWER CORD FRN	68 404 31
		LABEL, POWER CORD GER	68 404 32
39		NOT USED	
40		SCREW, 4–40 x 1/4 TR PH SS	99 010 56
41		SCREW, 6–32 x 3/8 TR PH SS	99 023 31
42		NOT USED	
43		SCREW, 8–32 x 3/8 TR PH SS	99 031 38
44		SCREW, 10–32 x 3/8 TR PH SS	99 041 27
45		NOT USED	
46		NOT USED	
47		NOT USED	
48		GROUND LABEL	68 212 00
49		NUT, 6–32 HX "KEPS" S CA	99 105 34
50		NUT, 1/4–20 HX "KEPS" S CA	99 109 41
51		NOT USED	
52		NUT, 8–32 HX "KEP" S CA	99 106 32
53		NOT USED	
54		WASHER, #4 LK SP SS	99 121 36
55		WASHER, #6 LK SP SS	99 122 16
56		NOT USED	
57		WASHER, #10 LK SP S CA	99 124 16
58		NOT USED	
59		NOT USED	
60		MOUNT, CABLE TIE	17 061 87
61		NOT USED	
62		NOT USED	
63		NOT USED	
64		SCREW, 6–32 x 1/2 TR PH SS	99 023 92
65		WASHER, LK EXT #8 SS	99 122 93
66		WASHER, FL #8 SS	99 122 62
67		LOCTITE 222	AR
68		LABEL, HEAVY EQUIPMENT (ENG)	68 404 35
		(SPN)	68 404 36
		(FRN)	68 404 37
		(GER)	68 404 38

(Change 16)

TABLE 6.17 VHA STAND, PARTS LIST

(Sheet 3 of 3)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
69		SCREW, 10–32 X 1/2"	99 042 06
70		LABEL, INTERMITTENT OPERATION	
		ENG	68 404 65
		SPN	68 404 66
		FRN	68 404 67
		GER	68 404 68

(Change 16)

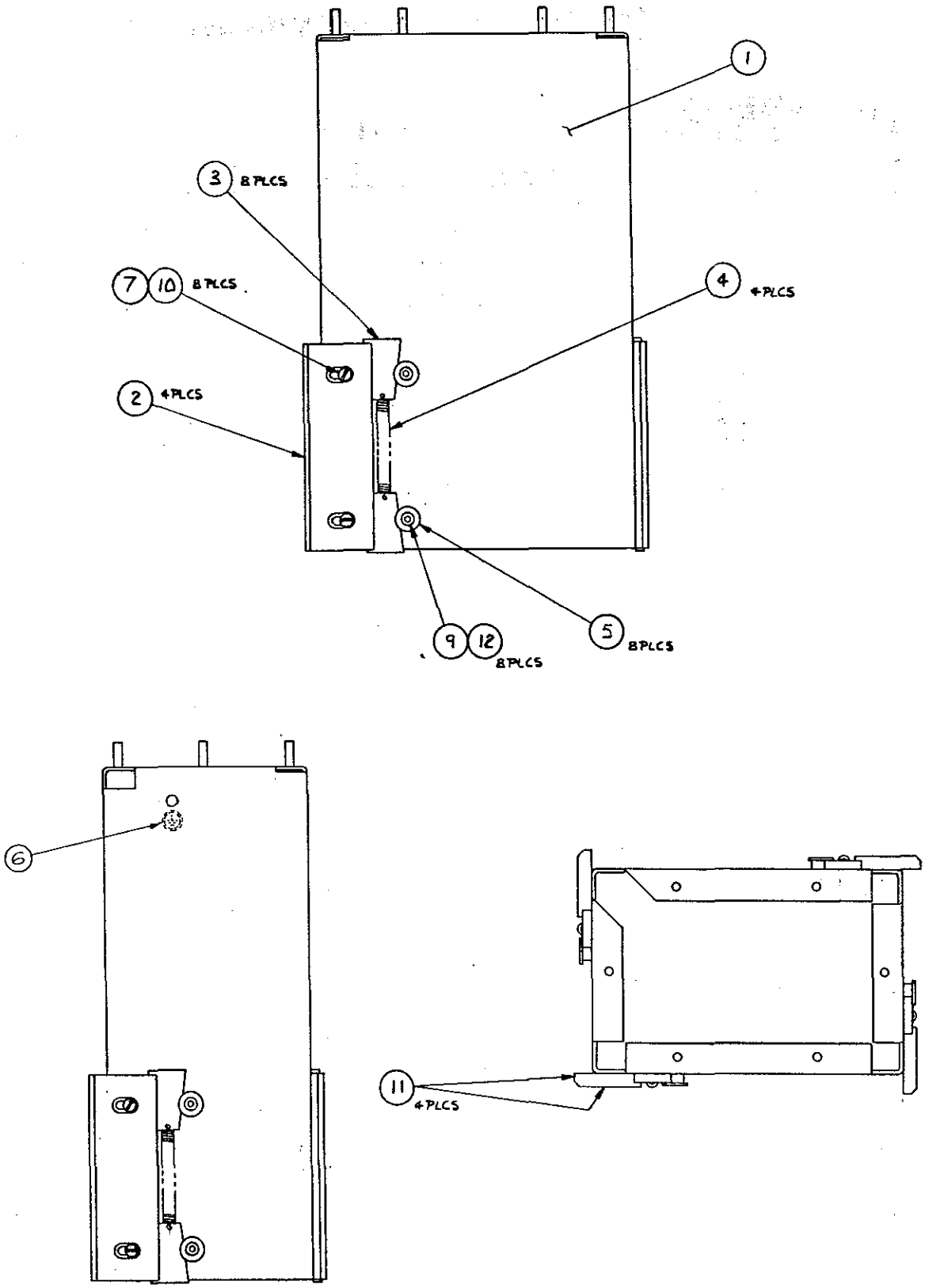
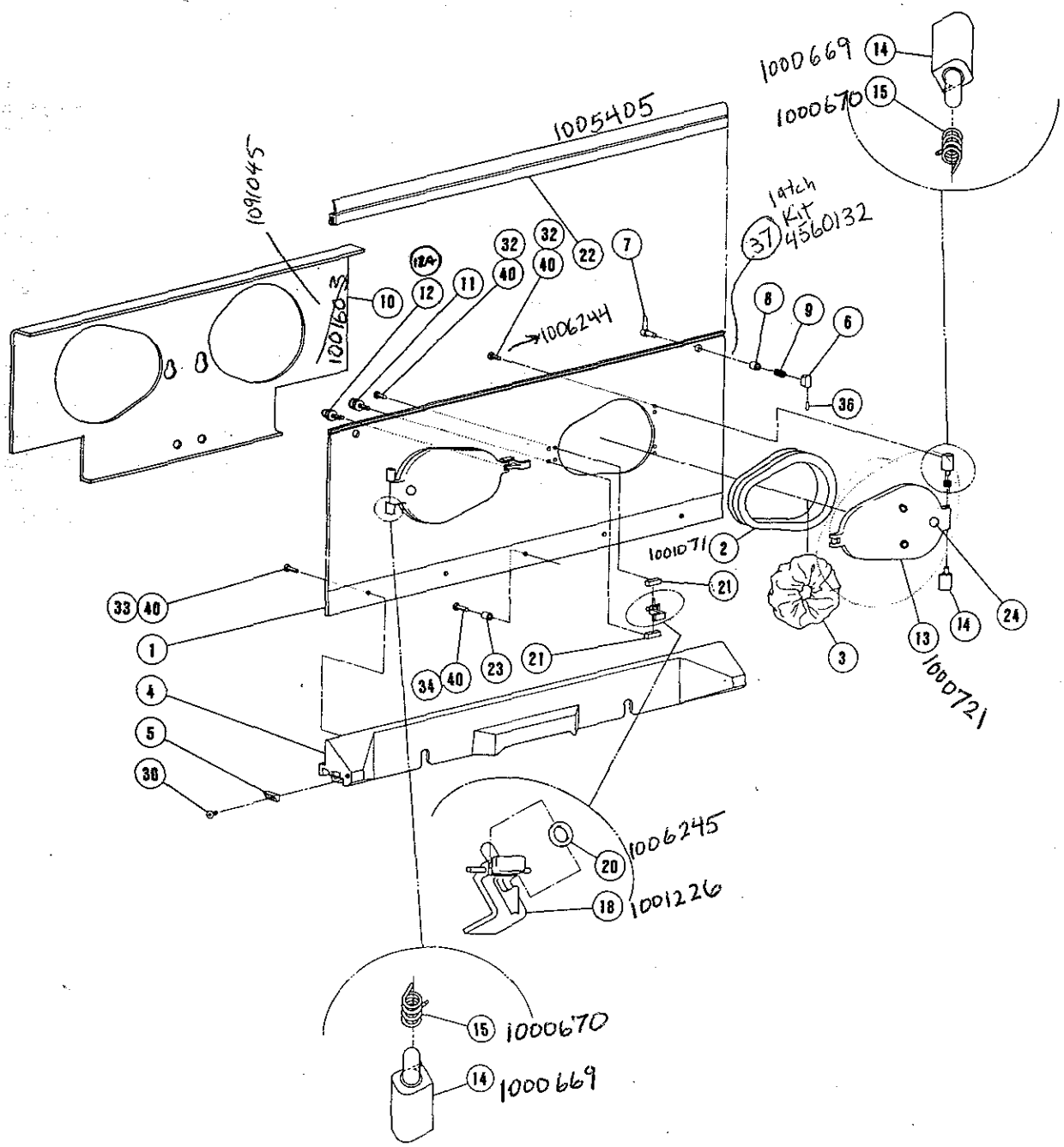


FIGURE 6.18 PARTS LOCATION DIAGRAM, INNER COLUMN ASSEMBLY

TABLE 6.18 INNER COLUMN ASSEMBLY, PARTS LIST

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
–		INNER COLUMN ASSEMBLY	68 404 40
1		COLUMN, INNER	68 405 11
2		GIB, SELF–ADJUSTING	68 405 25
3		WEDGE, GIB	68 405 27
4		SPRING, EXTENSION	68 405 29
5		BUSHING, RETAINER	68 405 31
6		LABEL, GROUND	68 212 00
7		NUT, 10–32 HX SS	99 107 00
8		NOT USED	
9		SCREW, 10–32 x 5/8 FL SK S BO	99 042 63
10		SCREW, 10–32 x 3/16 SH SL SS	99 195 02
11		LUBRICANT, DOW CORNING #111	99 900 69
12		LOCTITE, SCREW LOCK	99 901 38



deck assy
See pg. 6-8

recessed outlet panel 1008011
pg 6-11

cabinent stand
pg 6-56

FIGURE 6.19 PARTS LOCATION DIAGRAM, C100/200–2 SERIES 02 ACCESS PANEL ASSEMBLY

QT

TABLE 6.19 C100/200–2 SERIES 02 ACCESS PANEL ASSEMBLY

(Sheet 1 of 2)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER	
		PANEL ASSEMBLY DOUBLE WALL	68 159 90	
		SINGLE WALL	68 159 91	
1		PANEL, ACCESS (ACRYLIC ONLY, INCLUDES ITEMS 4,5,11,12,12A,22,23,30, 33,34,37)	68 157 76	
2		GASKET, ACCESS DOOR, REUSABLE $45	68 120 01	1001071
		GASKET, ACCESS DOOR, DISPOSABLE	68 120 70	
3		CUFF, ACCESS DOOR	68 120 56	
4*		STRIP, ACCESS PANEL MOUNTING, FRONT	68 121 21	
5*		PLATE, STRIKER	68 121 55	
6		REFER TO ITEM 37		
7		REFER TO ITEM 37		
8		REFER TO ITEM 37		
9		REFER TO ITEM 37		
10		SHIELD, HEAT $182	68 157 56	1001603
11*		KNOB, RETAINER, LARGE NEW STYLE .91 DIA	68 156 63	100199
12*		KNOB, RETAINER, SMALL NEW STYLE .75 DIA	68 156 62	100317
12A*		SCREW, 6 – 32 x 1 1/8", LG, PH, SS, MOUNTS ITEMS 11AND 12	99 025 43	
13		DOOR, ASSEMBLY $78	68 902 85	1000721
14		PIVOT, HINGE	68 510 05	1000665
15		SPRING, TORSION	68 510 10	1000670
16		NOT USED		
17		NOT USED		
18		LATCH ASSY, ACCESS DOOR INCLUDES ITEM 20	68 902 97	1001226
19		NOT USED		
20		O RING, 3/8 ID x 1/2 OD x 1/16, NPRN	99 160 54	1006245
21		PIVOT, LATCH	68 510 40	1001846
22*		STRIP, SEALING	68 512 10	100540
23*		STOP	68 157 66	
24		BUMPER, CLR POLYURETH, SELF ADH	78 293 10	
25		NOT USED		
26		NOT USED		
27		NOT USED		
28		NOT USED		
29		NOT USED		
30*		SCREW, 6–32 x 1/4 FL PH SS	99 022 75	
31		NOT USED		→ 1090645
32		SCREW, 6–32 x 7/16 FL PH SS NYLOCK	99 023 64	1006244
33*		SCREW, 8–32 x 5/16 TR PH SS	99 031 05	
34*		SCREW, 8–32 x 7/8 FL PH SS	99 033 19	

(Change 16)

TABLE 6.19 PARTS LOCATION DIAGRAM, C100/200–2 SERIES 02 ACCESS PANEL ASSEMBLY

(Sheet 2 of 2)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
35		NOT USED	
36		REFER TO ITEM 37	
■ 37*		PAWL LATCH REPLACEMENT KIT	68 902 96
38		NOT USED	
39		NOT USED	
40		COMPOUND, RTV SILICONE RUBBER, CLR	99 902 59

4560132 $29

■ * = INCLUDED WITH ITEM 1.

(Change 16)

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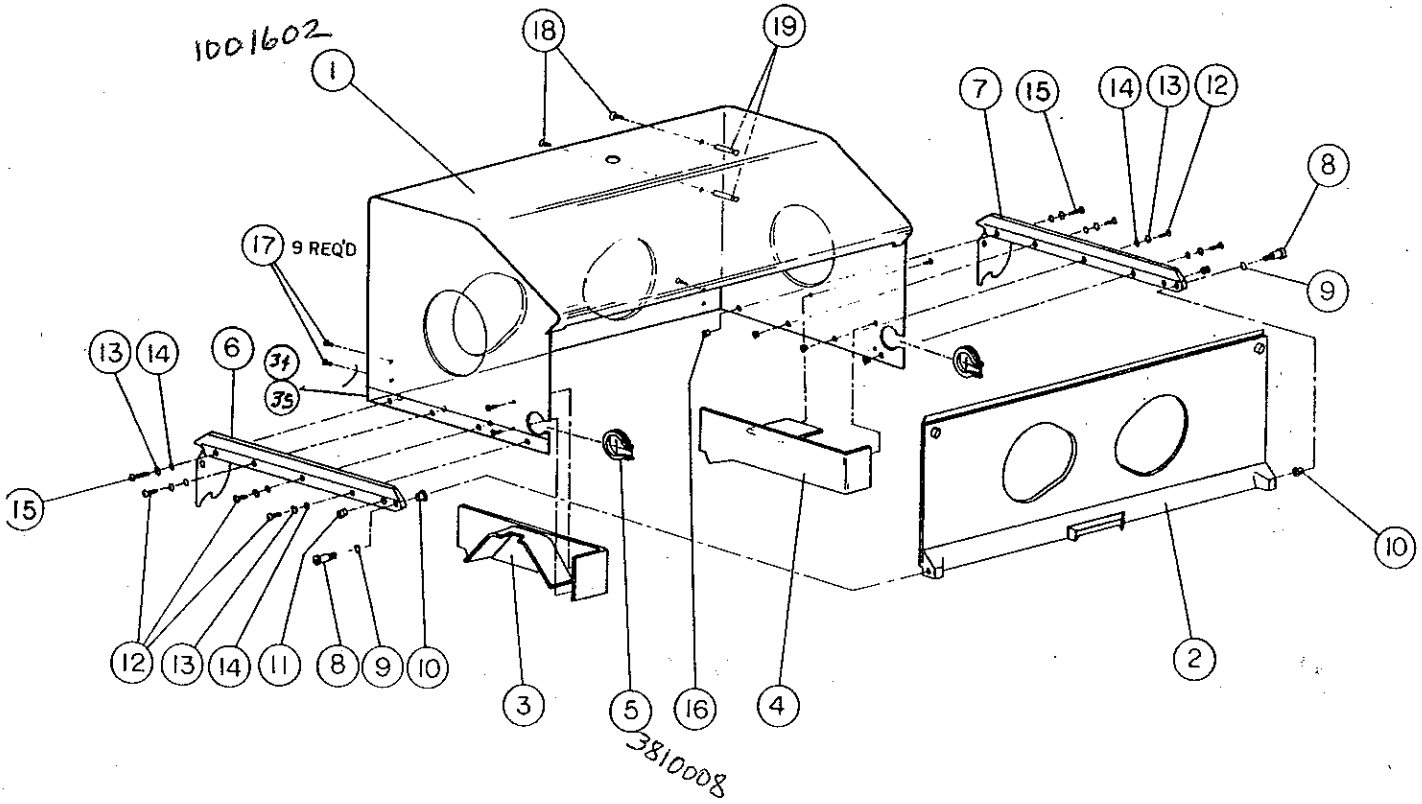
Inner shield, QT 1001601
door heat shield QT 1001603



REFER TO FIGURE 6.19 AND TABLE 6.19 FOR ACCESS DOOR PARTS.

IRIS PORT ASSEMBLY

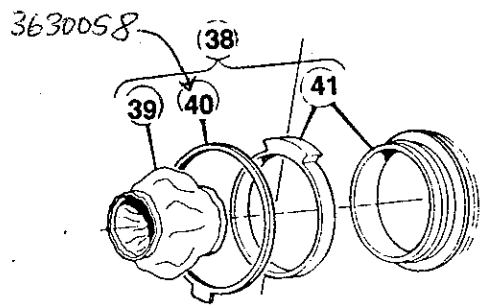


FIGURE 6.20 PARTS LOCATION DIAGRAM, C100/200–2 SERIES 02 HOOD ASSY

(Change 15)

TABLE 6.20 C100/200–2 SERIES 02 (OVAL DOORS) HOOD ASSEMBLY

(Sheet 1 of 2)

HOOD ASSEMBLY, DOUBLE WALL 68 117 70
HOOD ASSEMBLY, SINGLE WALL 68 117 75

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
1**		HOOD, INCUBATOR (ACRYLIC ONLY)	68 511 70
2*		ACCESS PANEL (REFER TO TABLE 6.19)	68 159 90
		SINGLE WALL	68 159 91
3***		BAFFLE LEFT (WHITE COLORED PLASTIC)	68 156 72
4***		BAFFLE RIGHT (WHITE COLORED PLASTIC)	68 156 76
5		ACCESS GROMMET	68 120 45
6		HOOD MOUNT, LEFT SIDE	68 121 10
7		HOOD MOUNT, RIGHT SIDE	68 121 00
8*		SCREW, SHOULDER SLOTTED HEAD	68 121 30
9*		WASHER, NON–METALLIC, 3/8 ID	68 121 40
10*		BEARING FLANGE, 3/8 ID	68 121 35
11*		PLUNGER SPRING	68 121 45
12		SCREW, 10 – 32 X 5/8, LG, TR, PH SS	99 023 58
13		WASHER, NO. 10, LOCK INTER, SS	99 123 92
14		WASHER, NO. 10, FLAT SS 0.062 THK	99 123 62
15		SCREW, 10 – 32, 7/8 LG, TR, PH, SS	99 043 18
16		STUD, THREADED, 10 – 32	26 301 14
17 (See Note)		SCREW, 6 – 32 X 7/16, TR, PH, SS	99 023 63
18		SCREW, 6 – 32 X 3/4, TR, PH, SS	99 024 69
19		HUMIDITY CARD MOUNTING STUD	68 120 41
20		NOT USED	
21		NOT USED	
22		NOT USED	
23		NOT USED	
24		NOT USED	
25		NOT USED	
26		NOT USED	
27		NOT USED	
28		NOT USED	
29		NOT USED	
30		NOT USED	
31		NOT USED	
32		NOT USED	
33		WHITE PLASTIC TRIM STRIP	68 147 00
34		REINFORCING DISK	68 156 03

*Not supplied with Hood Assembly – Must be ordered separately.
**Also order Quantity 2 of Item 42 –Trim Strip
***When replacing clear plastic baffles, order Retrofit Kit 68 902 83.
Note: Replacement Screws for clear colored baffles are Part No. 99 085 56.

(Change 16)

TABLE 6.20 C100/200–2 SERIES 02(OVAL DOORS) HOOD ASSEMBLY

(Sheet 2 of 2)

HOOD ASSEMBLY, DOUBLE WALL 68 117 70
HOOD ASSEMBLY, SINGLE WALL 68 117 75

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER
35		HEAT SHIELD, REAR (NOT SHOWN)	68 122 71
36		HEAT SHIELD SPACERS, FRONT (NOT SHOWN)	68 122 05 1006246
37		HEAT SHIELD SPACERS, REAR (NOT SHOWN)	68 122 10 1006247
		REAR HEAT SHIELD RETAINER KNOB (NOT SHOWN, PART OF ACCESS DOOR MOUNTING HARDWARE REFER TO TABLE 6.19 ITEMS 12 & 12A)	68 156 62
38		IRIS PORT ASSY	68 120 74
39		SLEEVE IRIS PORT, REUSABLE (P/O ITEM 38)	12 615 00
40	#13	RETAINER RING, IRIS PORT (P/O ITEM 38)	68 120 32 3630058
41		RING ASSY, IRIS PORT (P/O ITEM 38)	12 612 74
42*		TRIM STRIP(NOT SHOWN) COVERS SCREWS OF ITEM 6	68 400 26
43*		HOOD PIVOT SCREW AND WASHER RETROFIT KIT	68 902 75

*Not supplied with Hood Assembly – Must be ordered separately.
**Also order Quantity 2 of Item 42 –Trim Strip

(Change 16)

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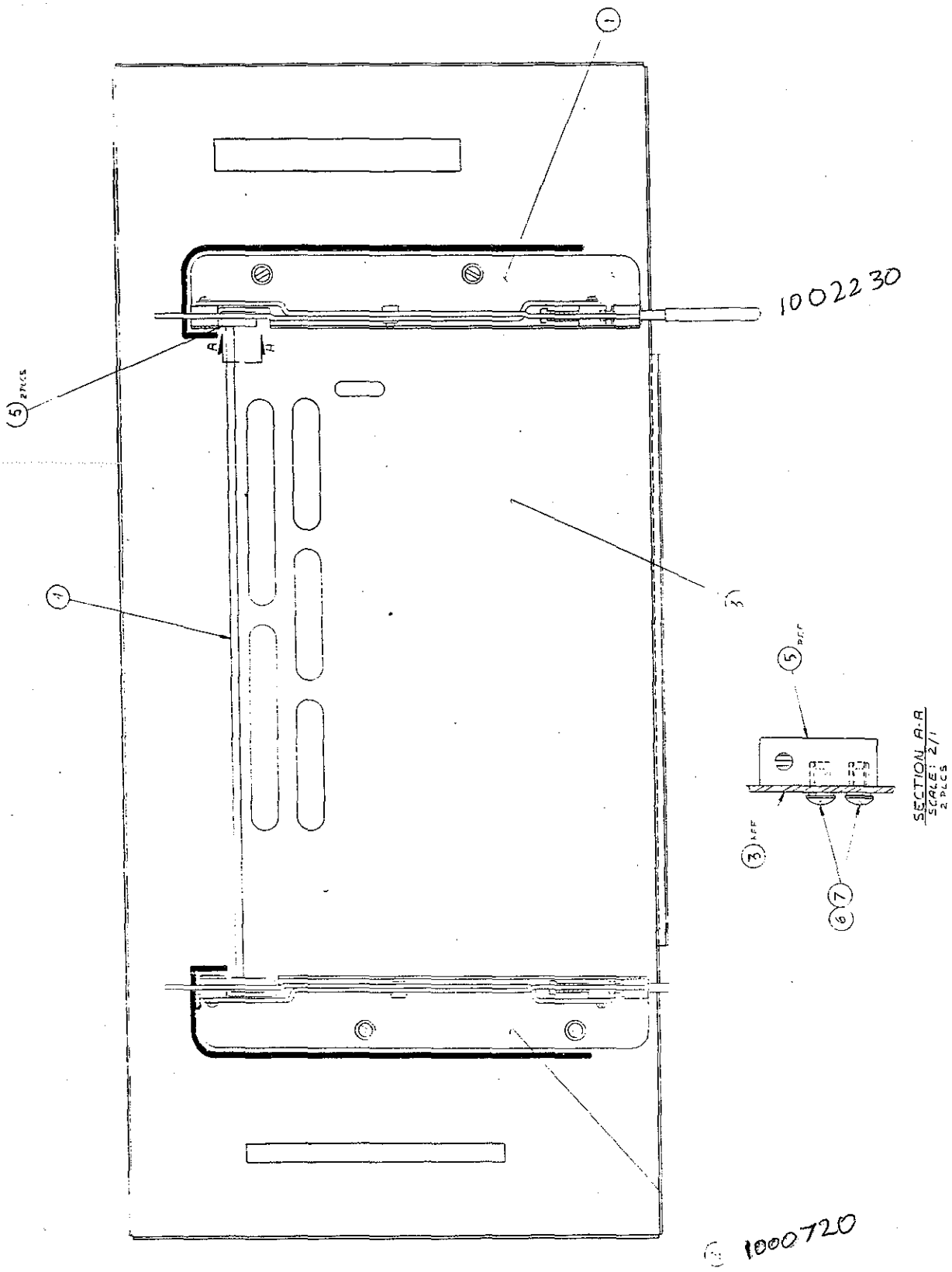

FIGURE 6.21 PARTS LOCATION DIAGRAM, C100/200–2 SERIES 02 MAIN DECK ASSEMBLY

2754

TABLE 6.21 PARTS LIST, C100/200–2 SERIES 02 MAIN DECK ASSEMBLY

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIGNATION	DESCRIPTION	PART NUMBER	
–		MAIN DECK ASSEMBLY	68 521 70	
1		ELEVATOR ASSEMBLY RIGHT HAND		
		ENGLISH	68 902 86	1002230 $226
		SPANISH	68 902 87	
		FRENCH	68 902 88	
		GERMAN	68 902 89	
2		ELEVATOR ASSEMBLY LEFT HAND		
		ENGLISH	68 902 90	1000720 $226
		SPANISH	68 902 91	
		FRENCH	68 902 92	
		GERMAN	68 902 93	
3		MAIN DECK, MARKED	68 521 00	
4		PLENUM SHAFT	68 141 32	
5		PLENUM SHAFT PIVOT	68 521 45	
6		SCREW, 6–32 x 5/16 TR PH SS	99 022 98	
7		WASHER, LK SP #6 SS	99 122 16	

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SECTION 7

DIAGRAMS

7.1 GENERAL

This section provides schematic and wiring diagrams for the Incubators.

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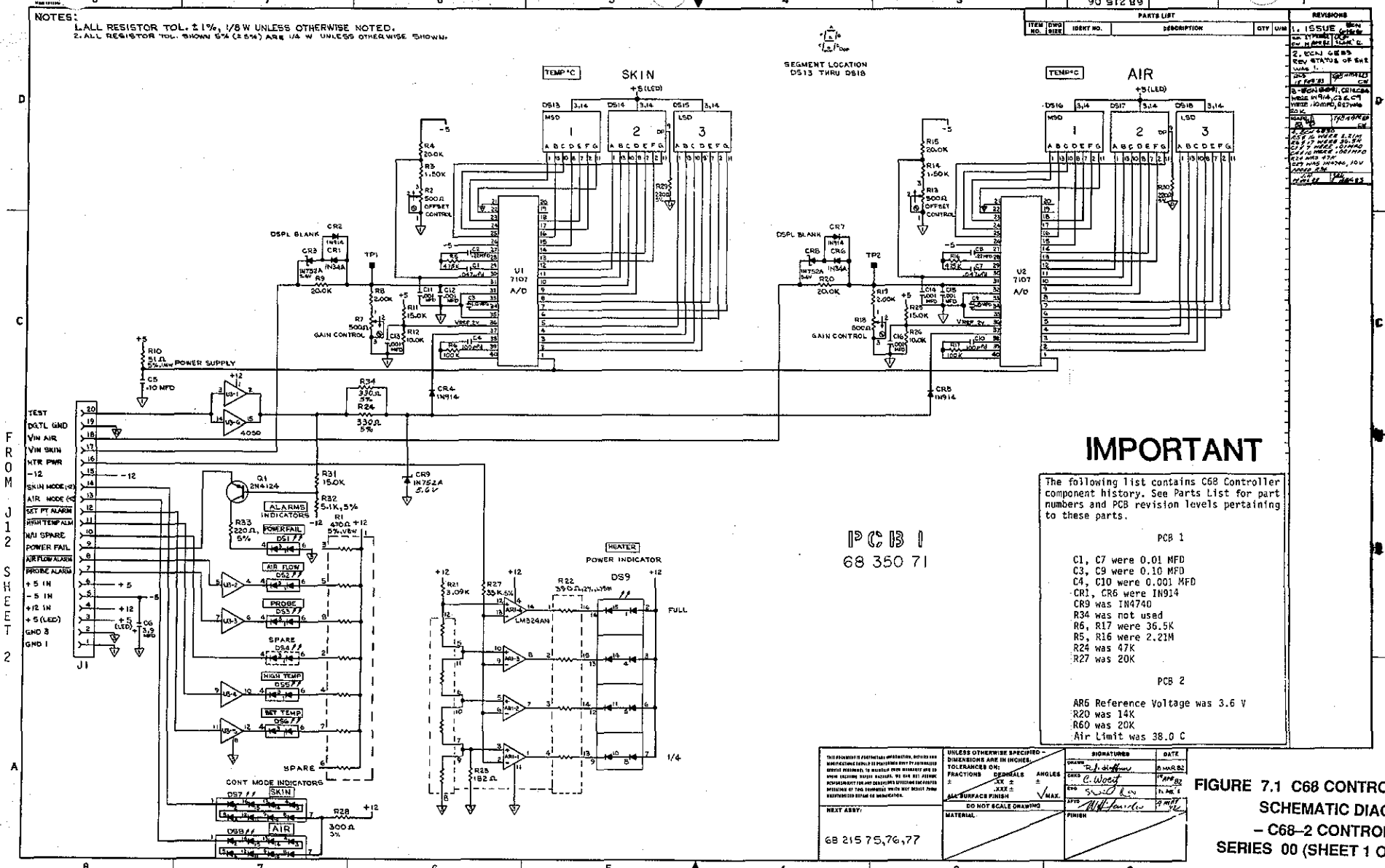


FIGURE 7.1 C68 CONTROLLER SCHEMATIC DIAGRAM – C68-2 CONTROLLER SERIES 00 (SHEET 1 OF 3)

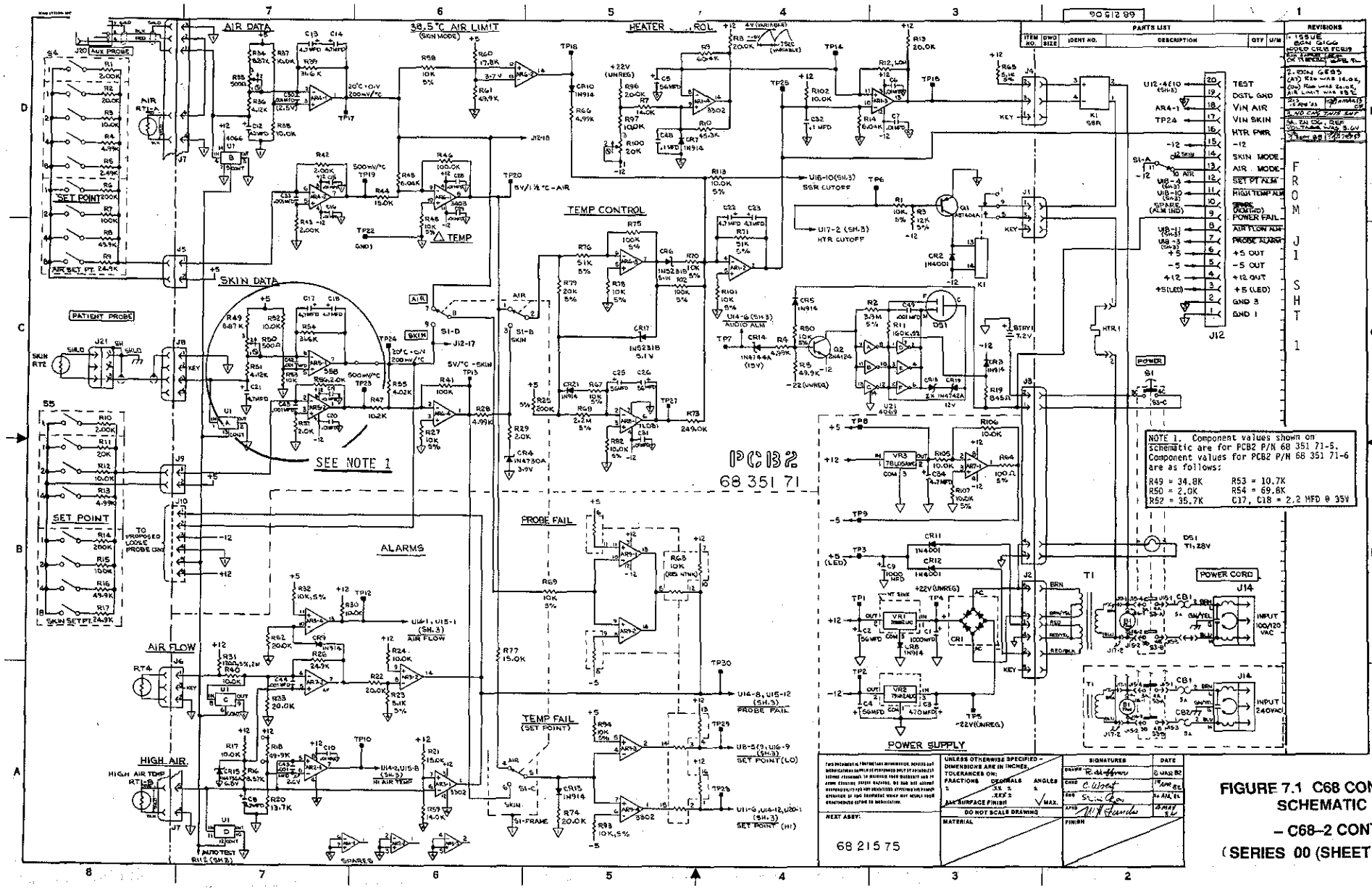
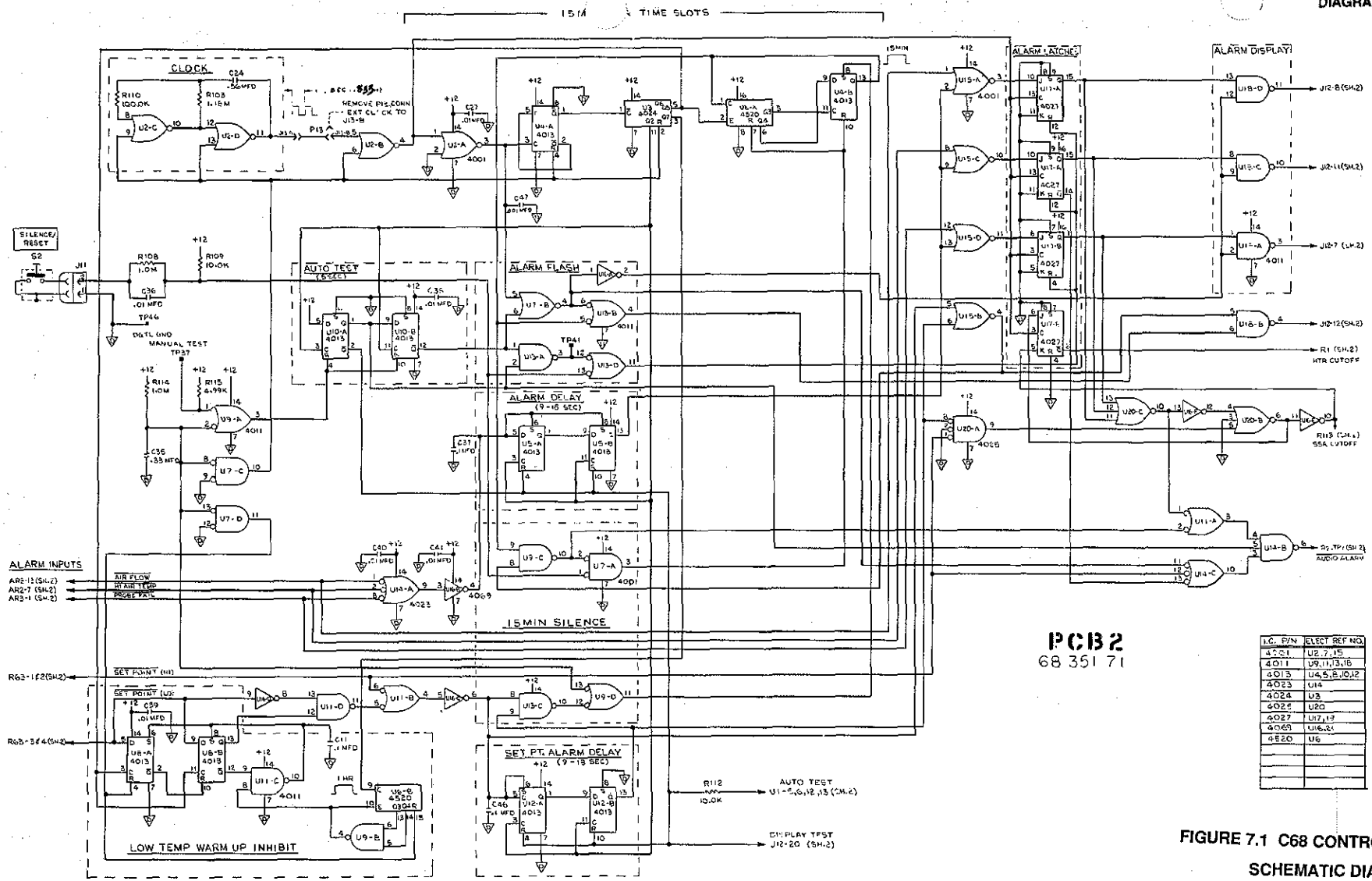


FIGURE 7.1 C68 CONTROLLER SCHEMATIC DIAGRAM – C68–2 CONTROLLER (SERIES 00 (SHEET 2 OF 3)



PCB2
68 351 71

I.C. P/N	ELECT REF NO.
4001	U2,7,15
4011	U9,11,13,16
4013	U4,5,8,10,12
4023	U14
4024	U3
4025	U20
4027	U17,19
4069	U16,21
4520	U6

FIGURE 7.1 C68 CONTROLLER SCHEMATIC DIAGRAM – C68–2 CONTROLLER SERIES 00 (SHEET 3 OF 3)

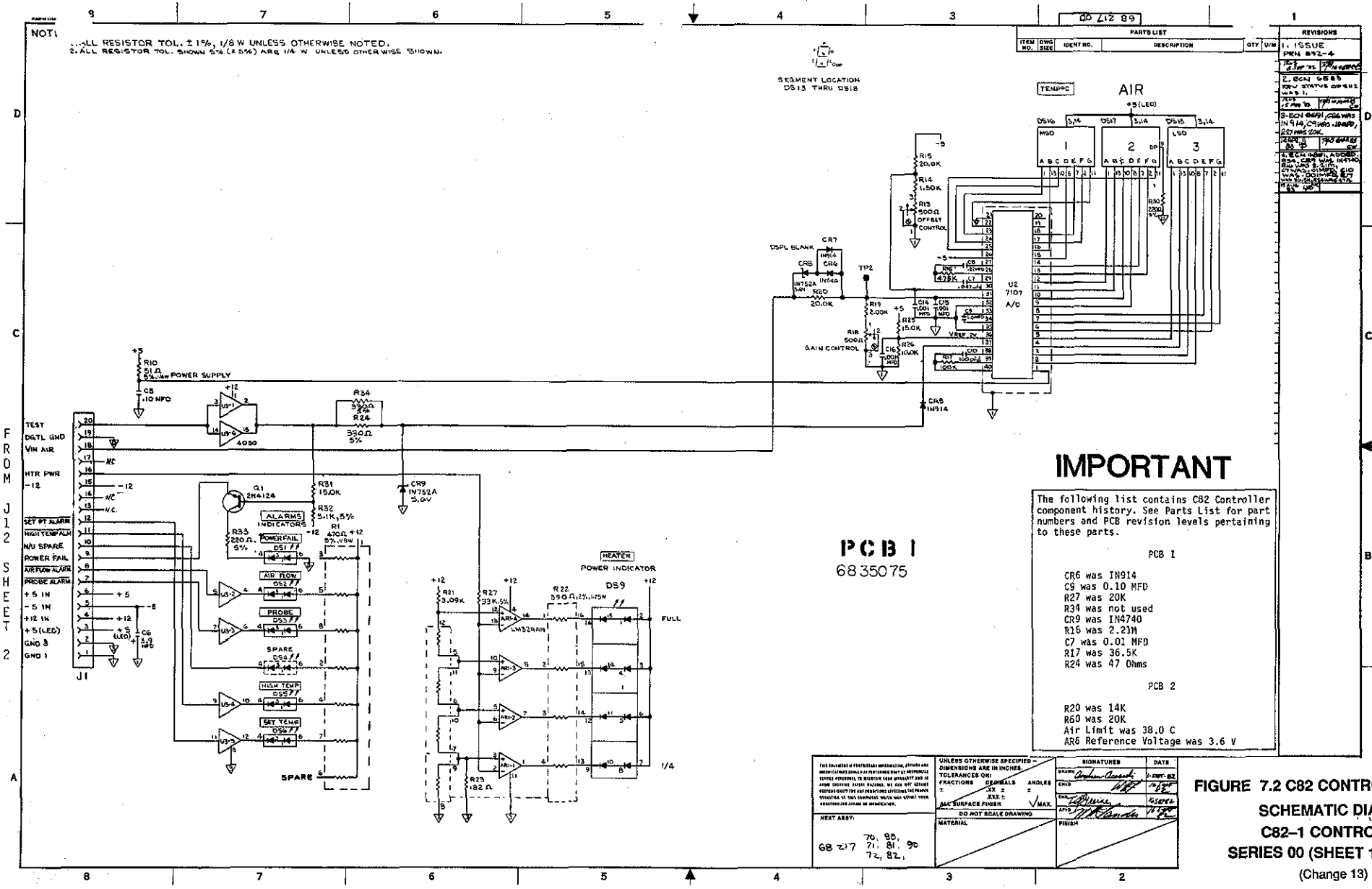


FIGURE 7.2 C82 CONTROLLE
SCHEMATIC DIAGRA
C82–1 CONTROLLEF
SERIES 00 (SHEET 1 OF
(Change 13)

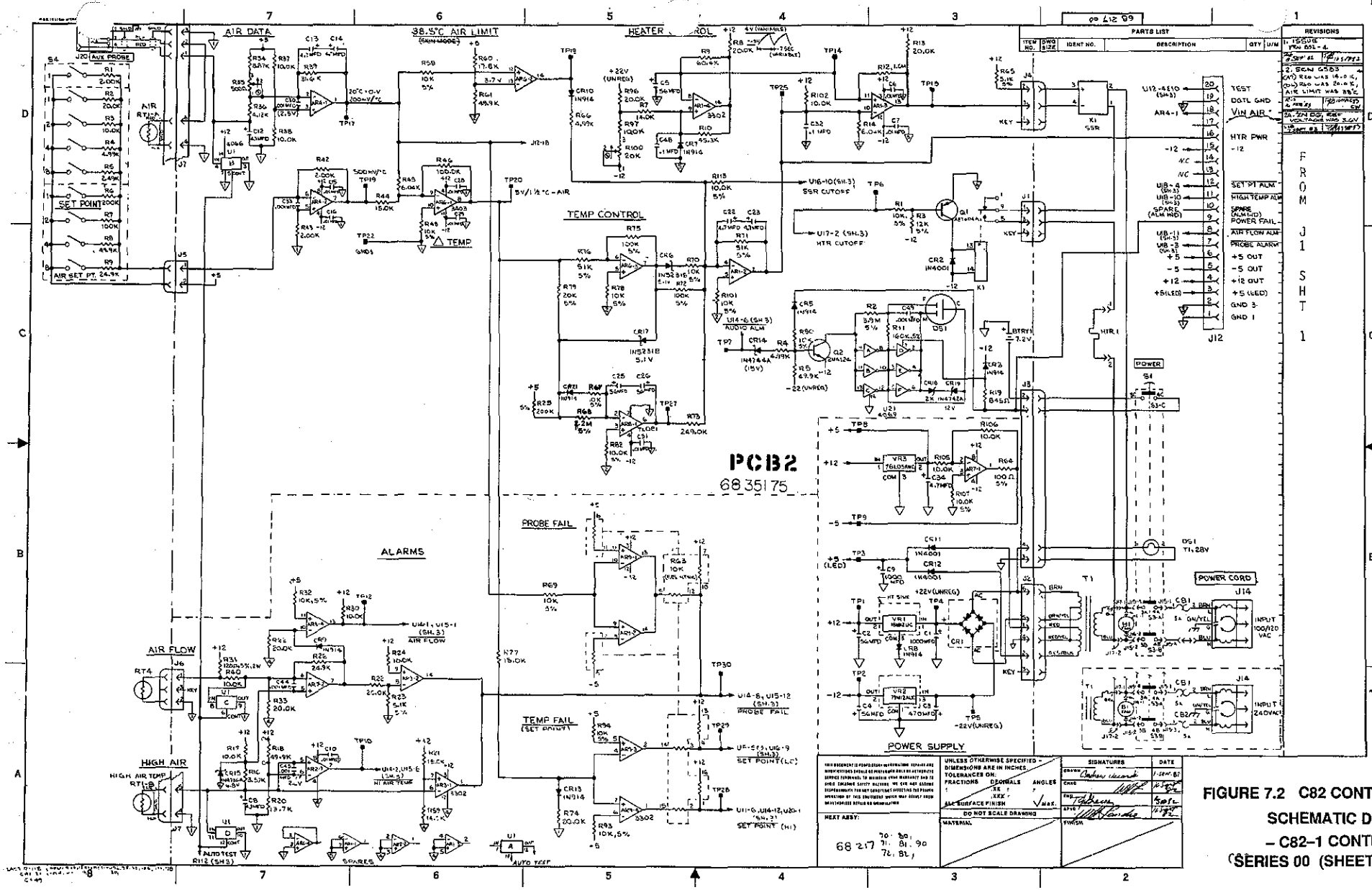
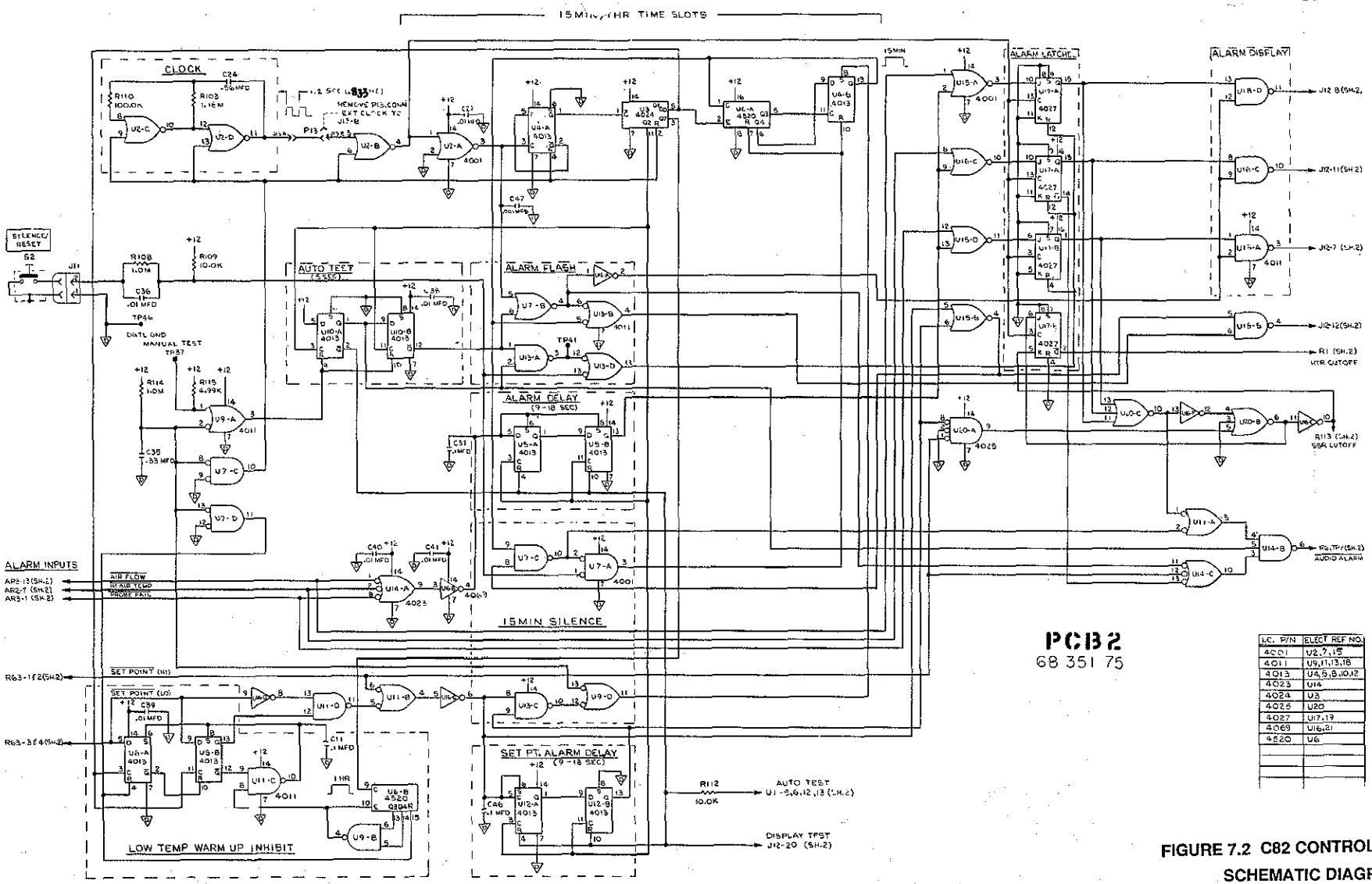
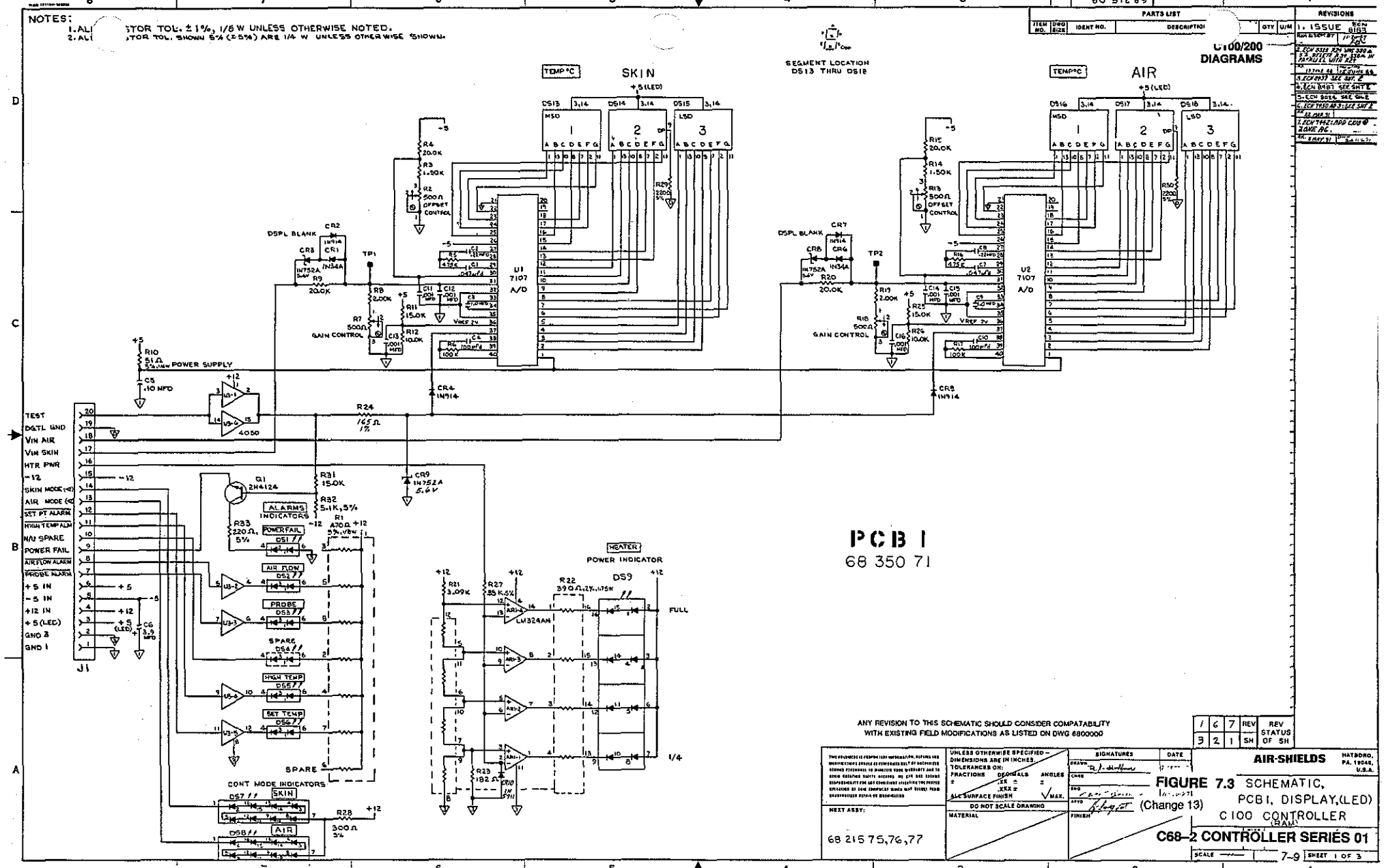


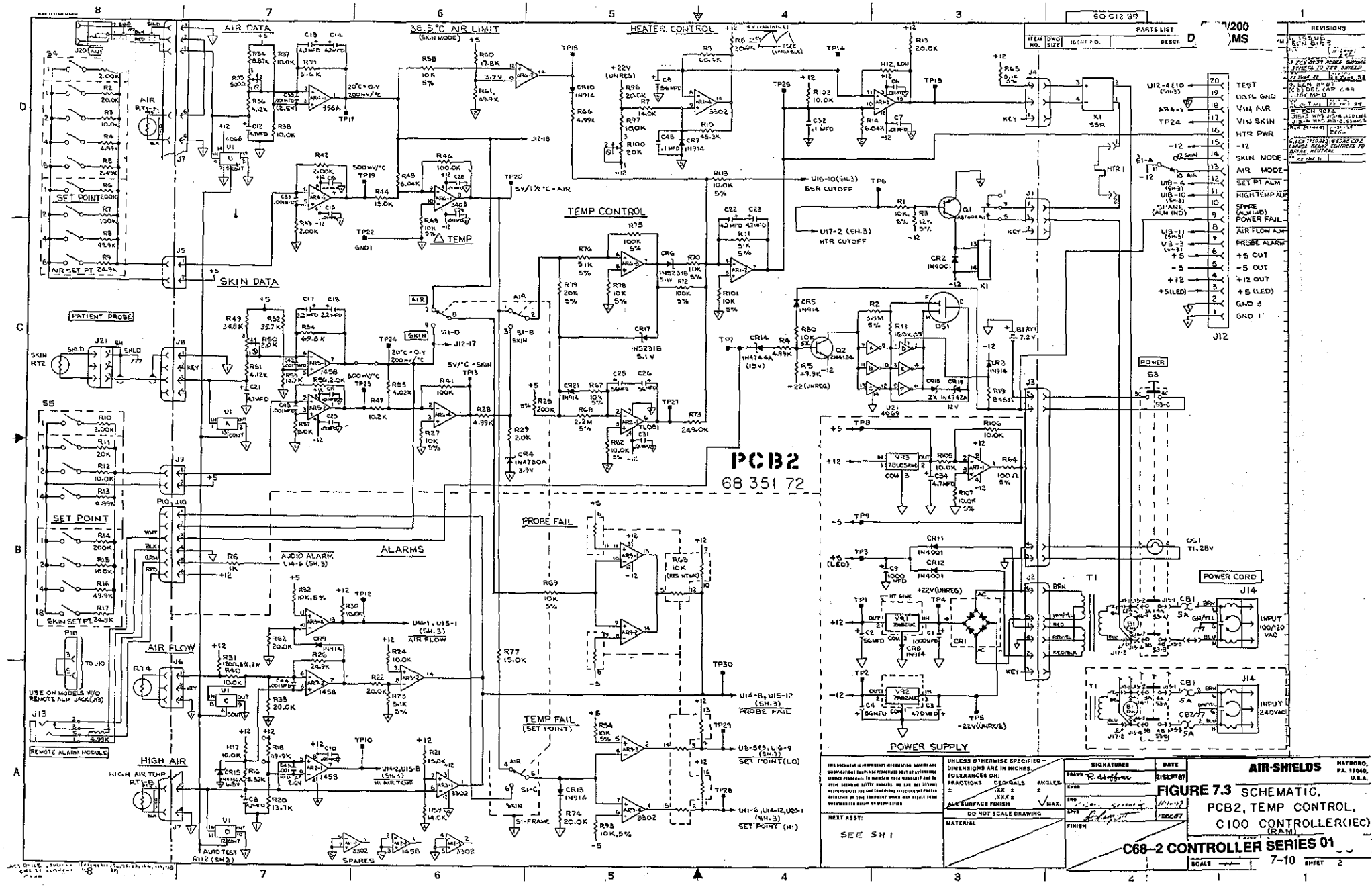
FIGURE 7.2 C82 CONTROLLER SCHEMATIC DIAGRAM – C82–1 CONTROLLER SERIES 00 (SHEET 2 OF 3)

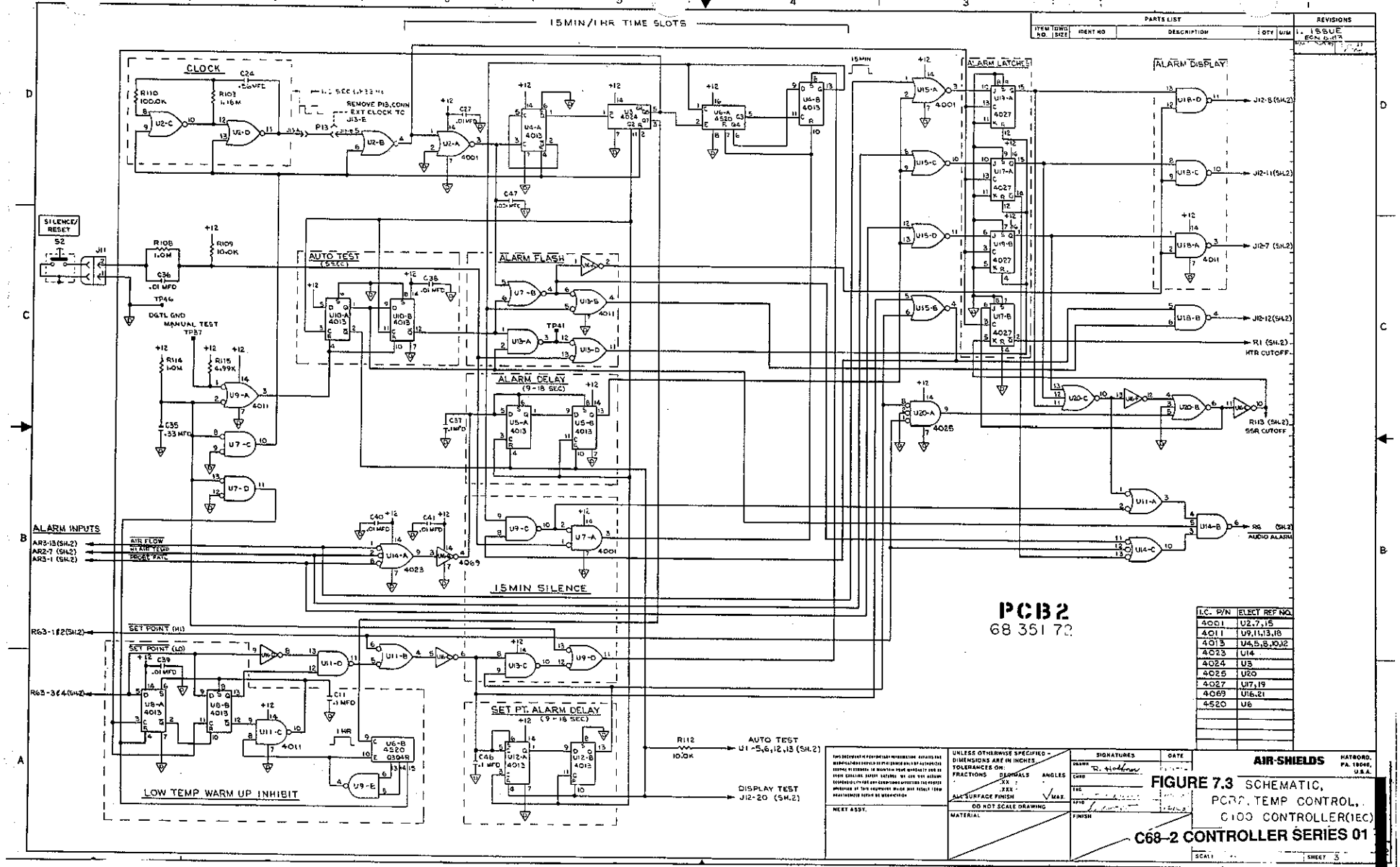


I.C. P/N	ELECT REF NO.
4001	U2,7,15
4011	U9,11,13,18
4013	U4,5,8,10,12
4023	U14
4024	U3
4025	U20
4027	U17,19
4069	U16,21
4520	U6

FIGURE 7.2 C82 CONTROLLER SCHEMATIC DIAGRAM – C82–1 CONTROLLER SERIES 00 (SHEET 3 OF 3)


NOTES:
1. ALL RESISTOR TOL. ±1%, 1/8 W UNLESS OTHERWISE NOTED.
2. ALL CAPACITOR TOL. SHOWN 5% (±5%) ARE 1/4 W UNLESS OTHERWISE SHOWN.
60 512 89
PARTS LIST
ITEM NO. | DWG SIZE | IDENT NO. | DESCRIPTION | QTY | U/M
REVISIONS
1. ISSUE 8183
C100/200 DIAGRAMS
SEGMENT LOCATION DS13 THRU DS18
TEMP°C
SKIN
AIR
+5(LED)
MSD
LSD
U1 7107 A/D
U2 7107 A/D
DSPL BLANK
GAIN CONTROL
VREF 2V
POWER SUPPLY
TEST
DGTL GND
VIN AIR
VIN SKIN
HTR PWR
-12
SKIN MODE (+2)
AIR MODE (+2)
SET PT ALARM
HIGH TEMP ALM
N/U SPARE
POWER FAIL
AIR FLOW ALARM
PROBE ALARM
+5 IN
-5 IN
+12 IN
+5 (LED)
GND 2
GND 1
J1
ALARMS INDICATORS
POWERFAIL DS1
AIR FLOW DS2
PROBE DS3
SPARE DS4
HIGH TEMP DS5
SET TEMP DS6
SPARE
CONT MODE INDICATORS
SKIN DS7
AIR DS8
HEATER POWER INDICATOR DS9
LM324AM
FULL
1/4
PCB 1
68 350 71
ANY REVISION TO THIS SCHEMATIC SHOULD CONSIDER COMPATABILITY WITH EXISTING FIELD MODIFICATIONS AS LISTED ON DWG 6800000
UNLESS OTHERWISE SPECIFIED — DIMENSIONS ARE IN INCHES
TOLERANCES ON: FRACTIONS DECIMALS ANGLES
DO NOT SCALE DRAWING
NEXT ASSY: 68 215 75,76,77
SIGNATURES DATE
AIR-SHIELDS HATBORO, PA. 19040, U.S.A.
FIGURE 7.3 SCHEMATIC, PCB1, DISPLAY,(LED) C100 CONTROLLER (RAM) (Change 13)
C68-2 CONTROLLER SERIES 01
SCALE
7-9
SHEET 1 OF 3


PCB2
68 351 72
AIR DATA
36.5°C AIR LIMIT
(SKIN MODE)
HEATER CONTROL
TEMP CONTROL
SKIN DATA
PATIENT PROBE
SET POINT
ALARMS
PROBE FAIL
TEMP FAIL
(SET POINT)
AIR FLOW
HIGH AIR
POWER SUPPLY
SPARES
SSR CUTOFF
HTR CUTOFF
AUDIO ALARM
REMOTE ALARM MODULE
USE ON MODELS W/O REMOTE ALM JACK(J13)
SEE SH 1
AIR-SHIELDS
HATBORO, PA. 19040, U.S.A.
FIGURE 7.3 SCHEMATIC, PCB2, TEMP CONTROL, C100 CONTROLLER(IEC) (RAM)
C68-2 CONTROLLER SERIES 01
7-10

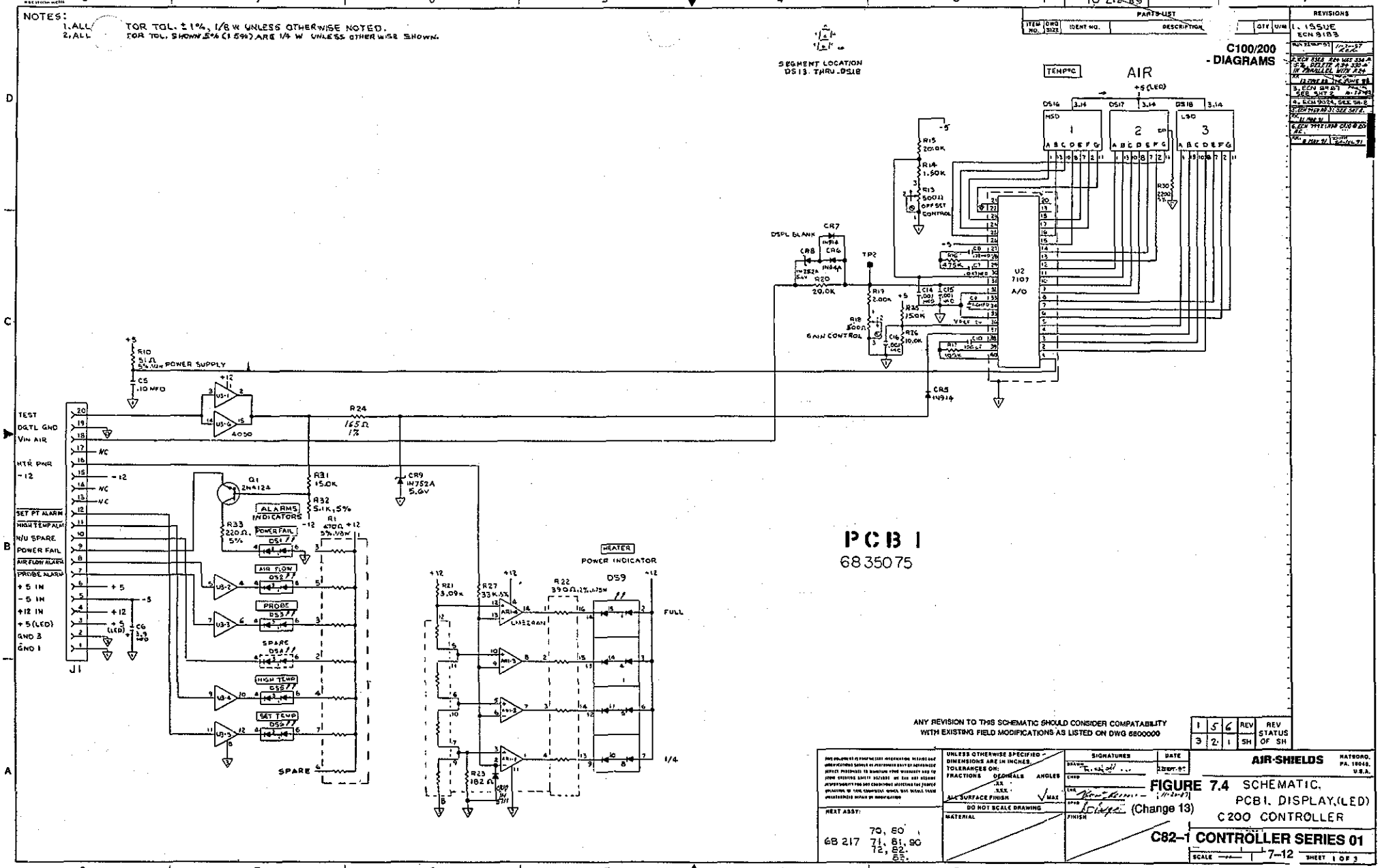


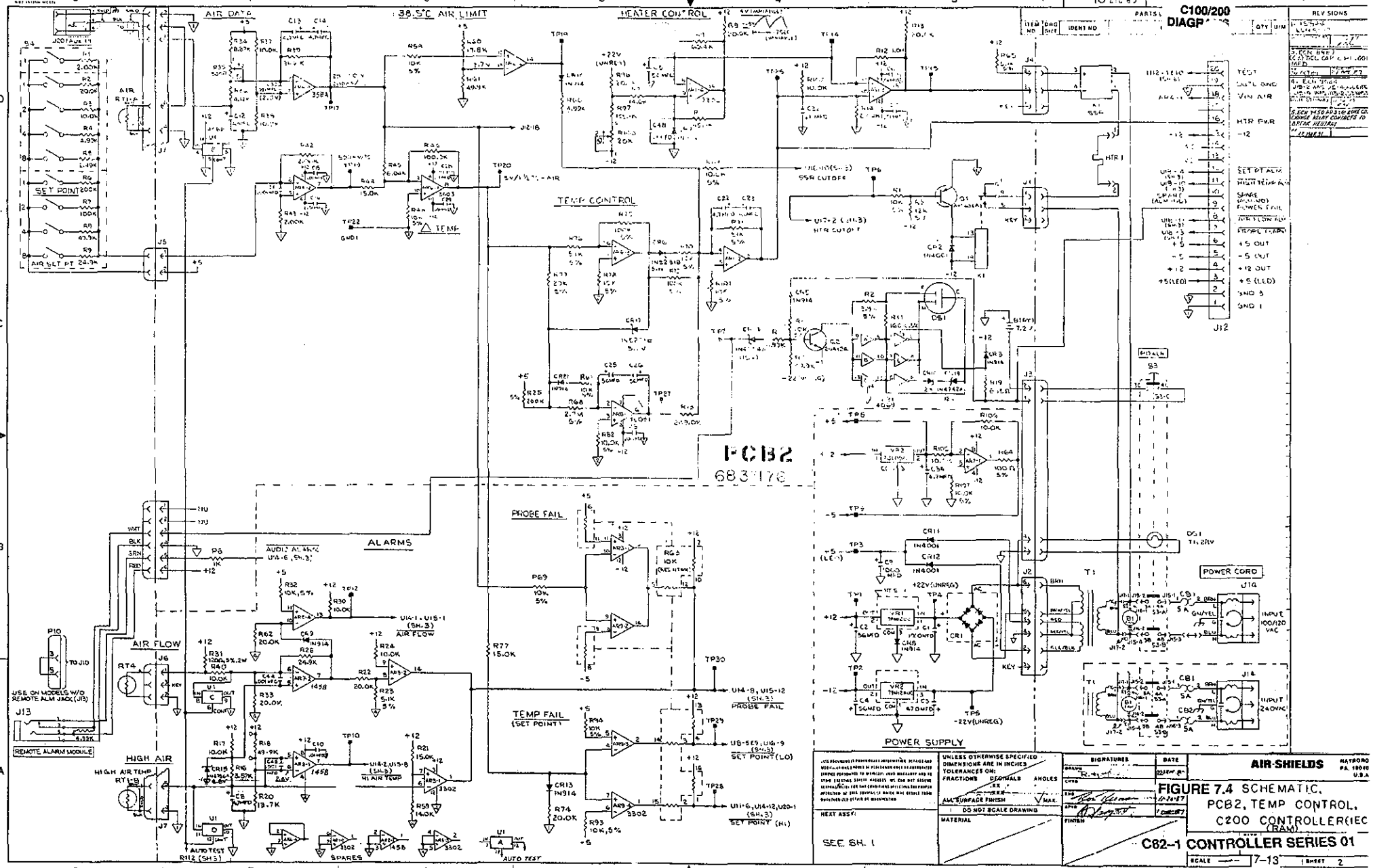
I.C. P/N	ELECT REF NO.
4001	U2,7,15
4011	U9,11,13,18
4013	U4,5,8,10,12
4023	U14
4024	U3
4025	U20
4027	U17,19
4069	U16,21
4520	U6

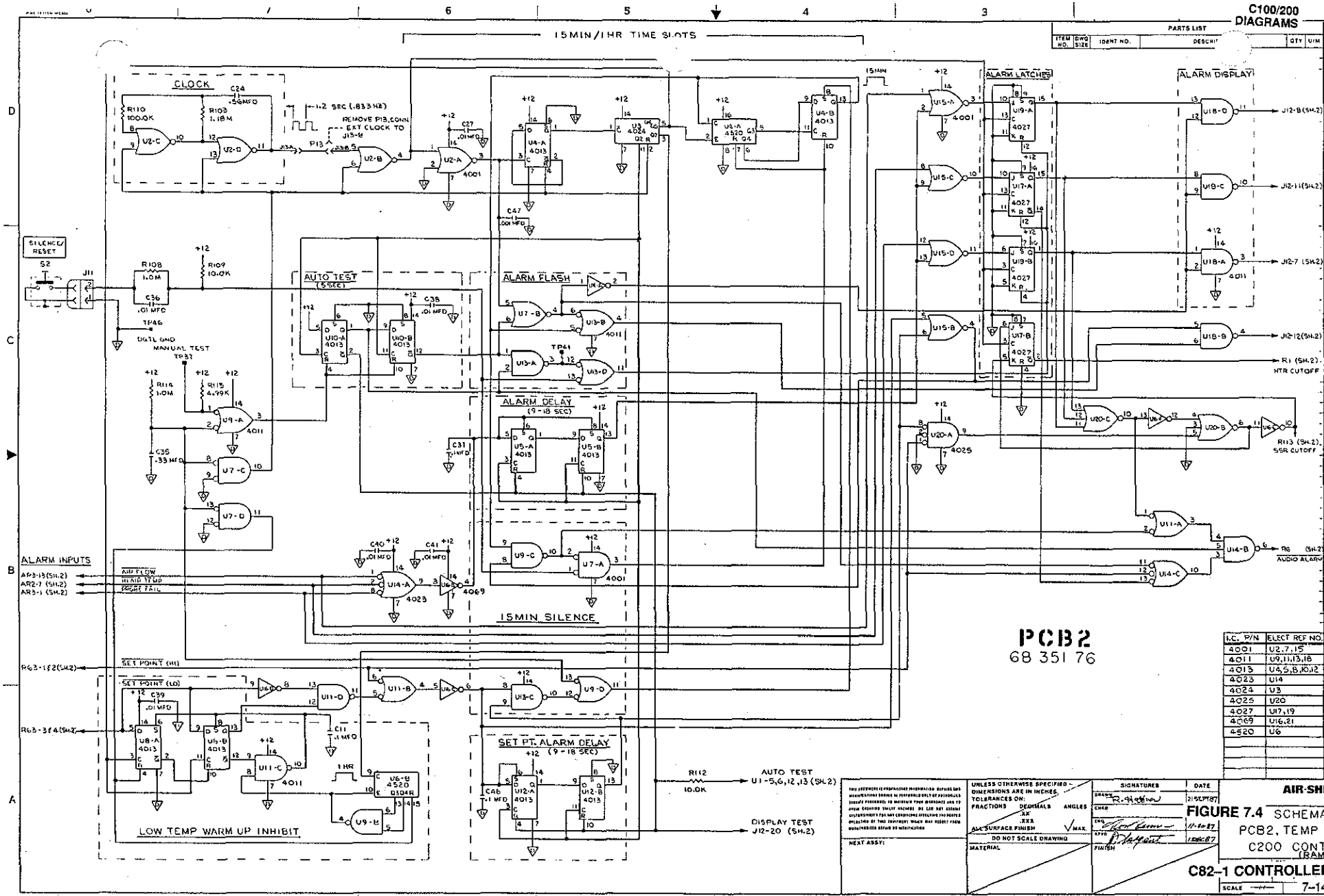
AIR-SHIELDS HATBORO, PA. 19040, U.S.A.

FIGURE 7.3 SCHEMATIC, PCB2, TEMP CONTROL, C100 CONTROLLER(IEC)

C68-2 CONTROLLER SERIES 01


NOTES:
1. ALL RESISTORS TOR TOL. ± 1%, 1/8 W UNLESS OTHERWISE NOTED.
2. ALL CAPACITORS FOR TOL. SHOWN ± % (1.5%) ARE 1/4 W UNLESS OTHERWISE SHOWN.
SEGMENT LOCATION DS13 THRU DS18
PARTS LIST
ITEM NO. DWG SIZE IDENT NO. DESCRIPTION QTY U/M
REVISIONS
1. ISSUE ECN 8183
C100/200 - DIAGRAMS
TEMP°C
AIR
DS16 DS17 DS18
MSD LSD
U2 7107 A/D
TP2
CR7
CR8
CR6
DSPL BLANK
GAIN CONTROL
R10 51Ω POWER SUPPLY
C5 .10 MFD
U3-1 U3-6 4050
R24 165Ω 1%
CR5 1N914
CR9 1N752A 5.6V
Q1 2N4124
R31 15.0K
R32 5.1K, 5%
R1 470Ω 5% 1/8W
ALARMS INDICATORS
POWER FAIL DS1
AIR FLOW DS2
PROBE DS3
SPARE DS4
HIGH TEMP DS5
SET TEMP DS6
SPARE
J1
TEST
DGTL GND
VIN AIR
HTR PWR
-12
SET PT ALARM
HIGH TEMP ALM
N/U SPARE
POWER FAIL
AIR FLOW ALARM
PROBE ALARM
+5 IN
-5 IN
+12 IN
+5 (LED)
GND 3
GND 1
HEATER POWER INDICATOR DS9
R21 3.09K
R27 33K, 5%
R22 390Ω, 2%, 1/4W
R23 182Ω
FULL
1/4
PCB 1
68 35075
ANY REVISION TO THIS SCHEMATIC SHOULD CONSIDER COMPATABILITY WITH EXISTING FIELD MODIFICATIONS AS LISTED ON DWG 6800000
REV 1 5 6
REV STATUS OF SH 3 2 1
NEXT ASSY: 68 217 70, 80, 71, 81, 90, 72, 82, 83
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: FRACTIONS DECIMALS ANGLES
DO NOT SCALE DRAWING
MATERIAL
SIGNATURES DATE
AIR-SHIELDS HATBORO, PA. 19040, U.S.A.
FIGURE 7.4 SCHEMATIC, PCB1, DISPLAY,(LED) C200 CONTROLLER (Change 13)
C82-1 CONTROLLER SERIES 01
SCALE 7-12
SHEET 1 OF 3


C100/200 DIAGR
AIR DATA
38.5°C AIR LIMIT
HEATER CONTROL
TEMP CONTROL
SET POINT
AIR SET PT
ALARMS
PROBE FAIL
TEMP FAIL (SET POINT)
AIR FLOW
HIGH AIR
POWER SUPPLY
PCB2
683176
SSR CUTOFF
HTR CUTOFF
SPARES
AUTO TEST
POWER CORD
REMOTE ALARM MODULE
AIR-SHIELDS
FIGURE 7.4 SCHEMATIC, PCB2, TEMP CONTROL, C200 CONTROLLER(IEC (RAM)
C82-1 CONTROLLER SERIES 01



PCB2
68 351 76

I.C. P/N	ELECT REF NO.
4001	U2,7,15
4011	U9,11,13,18
4013	U4,5,8,10,12
4023	U14
4024	U3
4025	U20
4027	U17,19
4069	U16,21
4520	U6

FIGURE 7.4 SCHEMATIC, PCB2, TEMP CONTROL, C200 CONTROLLER(IB (RAM)

C82-1 CONTROLLER SERIES

NOTES:
1. FOR MATIC SEE DWG NO. 68 215 09
2. FOR LIST SEE DWG NO. 68 992 70 & 71.
3. NUMBERS SHOWN IN PARENTHESES ( ) ARE WIRE NUMBERS FROM WIRE LIST.

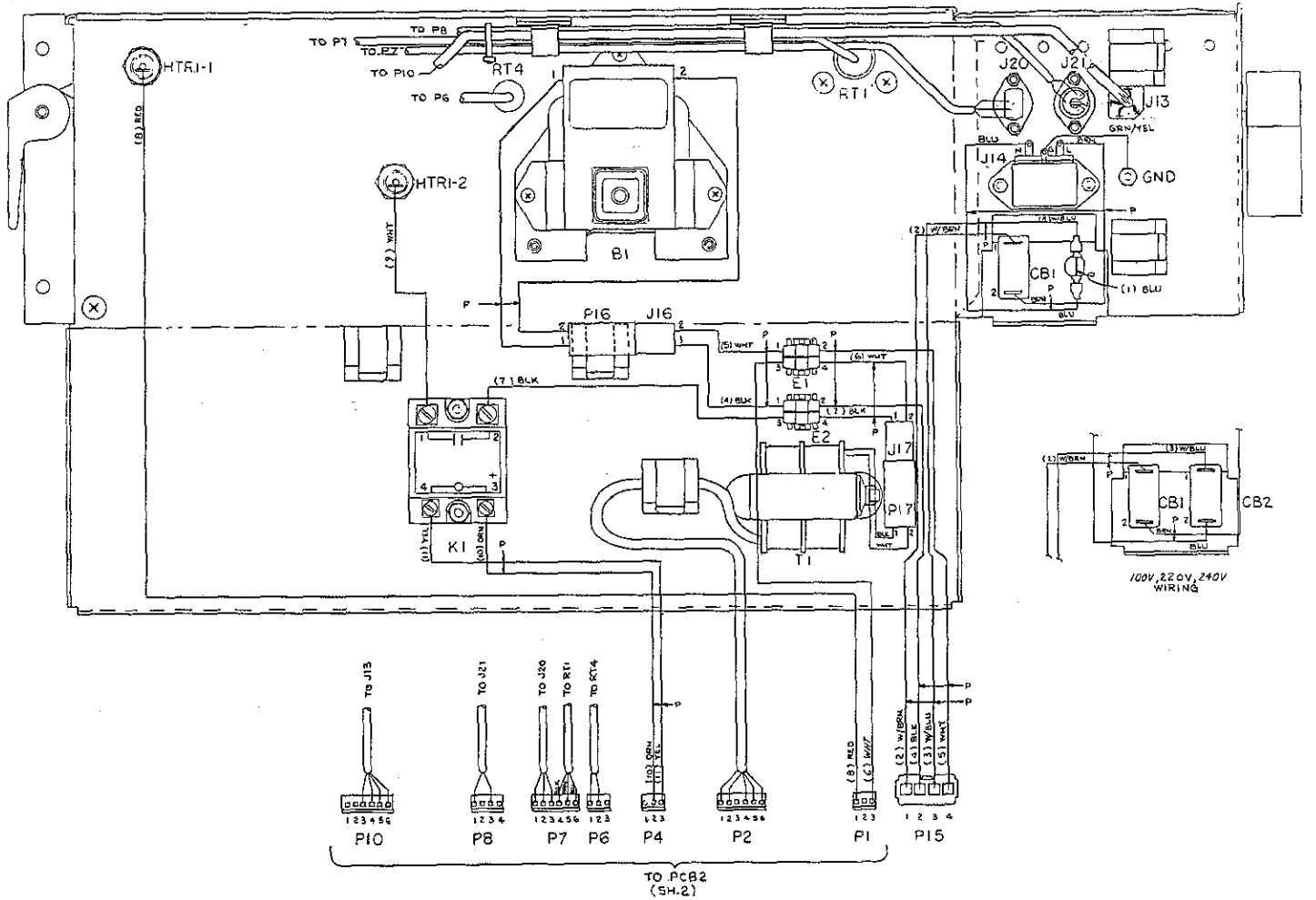
PARTS LIST

ITEM NO	DWG SIZE	IDENT NO	DESCRIPTION	QTY	U/M

REVISIONS

LTR	DESCRIPTION	DATE	APPROVED
1	ISSUE	6/16/82	
2	ECN 8155	7 MAR 82	
3	ECN 8185	4 MAY 82	

C100/200 DIAGRAMS



UNLESS OTHERWISE SPECIFIED - DIMENSIONS ARE IN INCHES
TOLERANCES ON: FRACTIONS DECIMALS ANGLES .XX .XXX
ALL SURFACE FINISH √MAX.
DO NOT SCALE DRAWING
MATERIAL
FINISH
NEXT ASSY: 68 215 7- 8- 9-

SIGNATURES		DATE
DRAWN	D. Hoffman	4 MAR 82
CHKD	C. Wood	11 MAR 82
ENG APPR	S. L. [illegible]	7 APR 82
MFG APPR	W. H. Smith	4 MAY 82

AIR-SHIELDS HATBORO, PA 19040 U.S.A.

FIGURE 7.5
DIAGRAM, WIRING,
C68 CONTROLLER,

SIZE D
SCALE 1:1
SHEET 1 OF 2

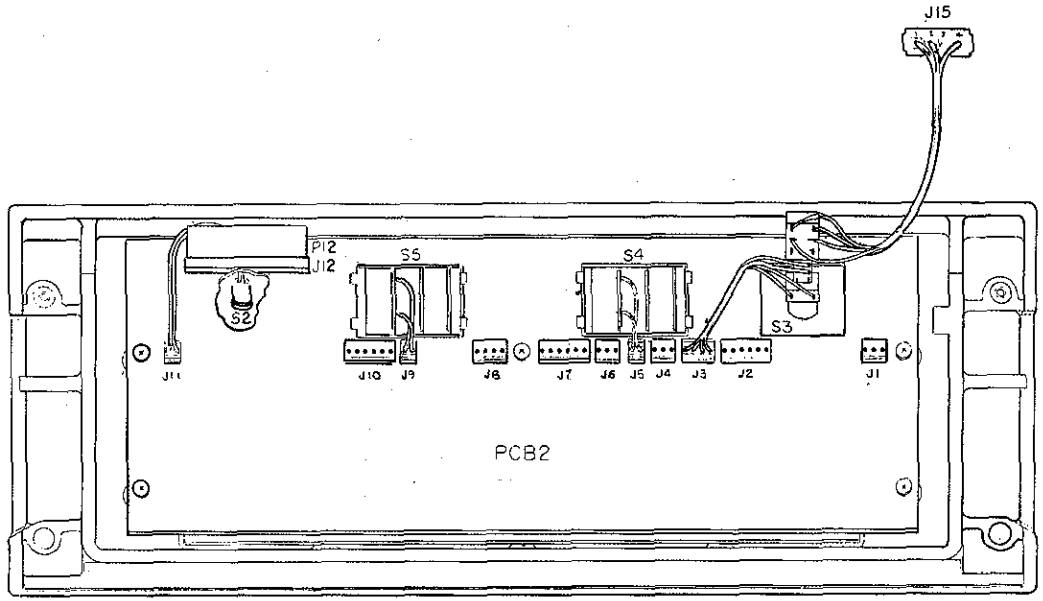


**FIGURE 7.5 C68 CONTROLLER, WIRING DIAGRA
(SHEET 2 OF 2)**

NOTES:
1. FOR MATIC SEE DWG. NO. 68 217 01.
2. FOR , LIST SEE DWG. NO. 68 992 71.
3. NUMBERS SHOWN IN PARENTHESIS ( ) ARE WIRE NUMBERS FROM WIRE LIST.

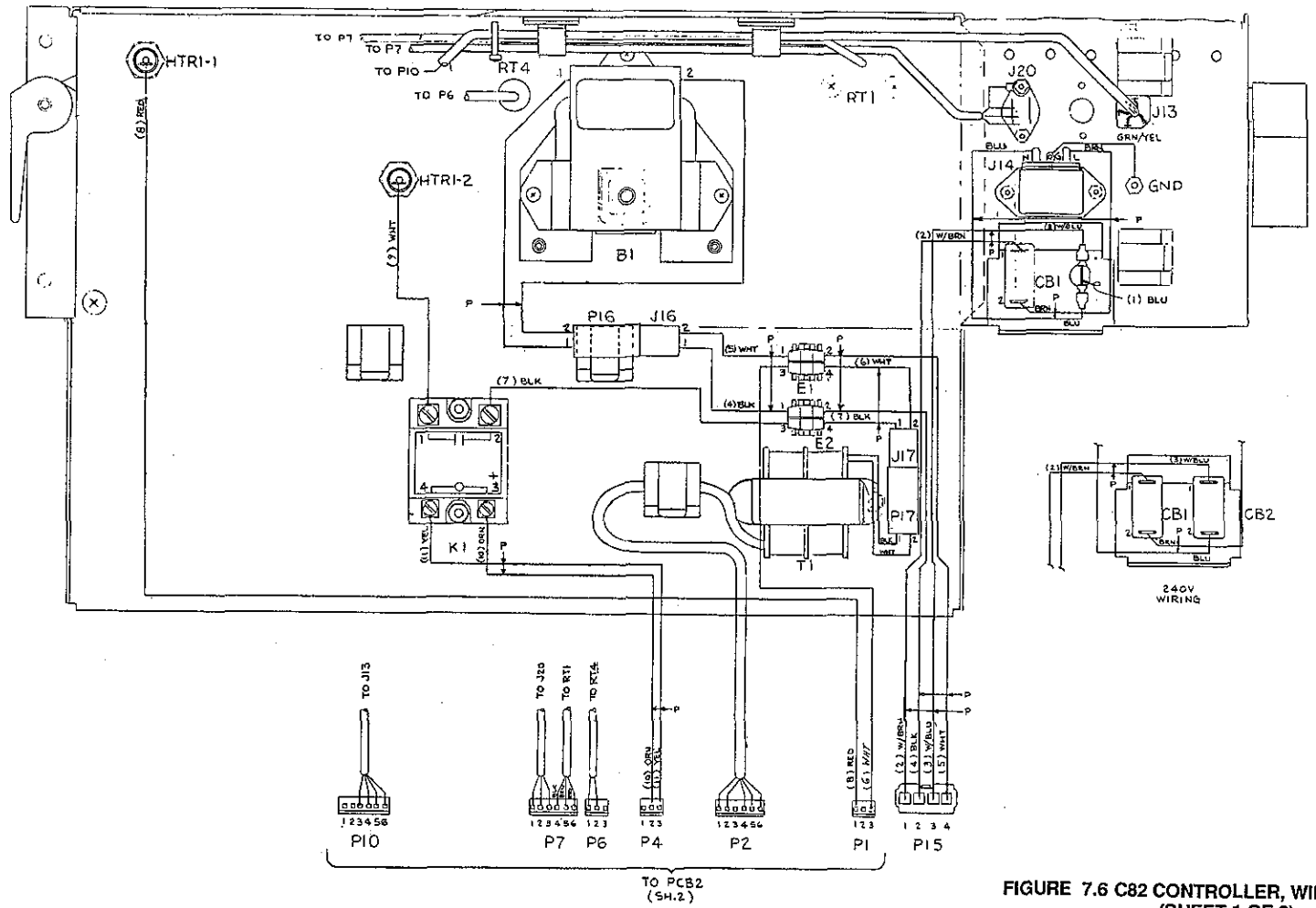


FIGURE 7.6 C82 CONTROLLER, WIRING DIAGRAM (SHEET 1 OF 2)

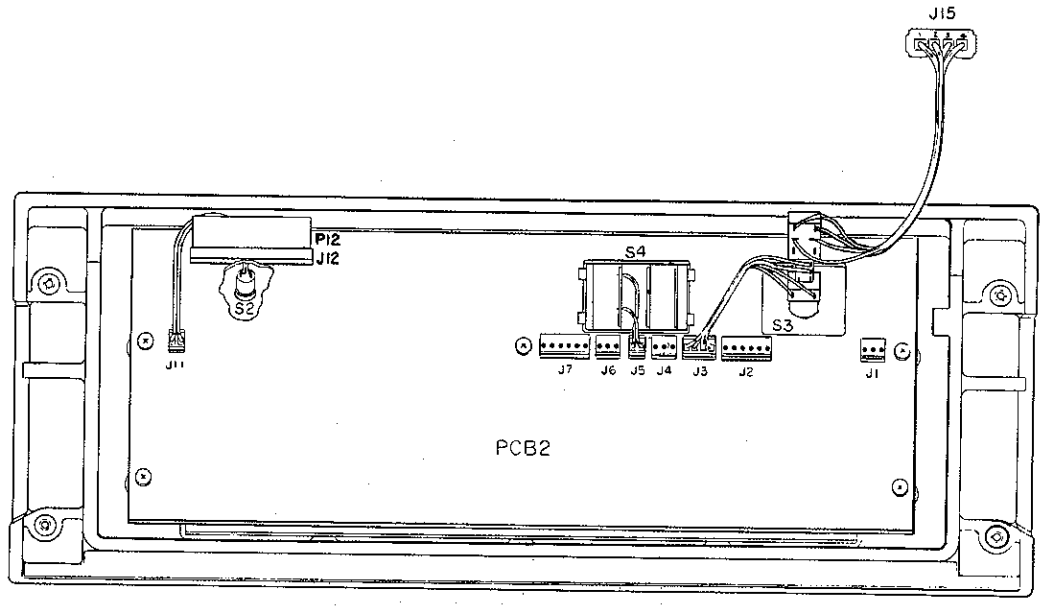


FIGURE 7.6 C82 CONTROLLER, WIRING DIAG
(SHEET 2 OF 2)